AMERICAN ANNALS

OF

The Deaf

ORGAN OF THE CONFERENCE OF EXECUTIVES OF AMERICAN SCHOOLS FOR THE DEAF, AND THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF

EDITED BY

IRVING S. FUSFELD

UNDER THE DIRECTION OF

PERCIVAL HALL, OF THE DISTRICT OF COLUMBIA; FRANK M. DRIGGS, OF UTAH; HERBERT E. DAY, OF MISSOURI; MADISON J. LEE, OF KENTUCKY; OSCAR M. PITTENGER, OF INDIANA; AND J. W. BLATTNER, OF OKLAHOMA.

EXECUTIVE COMMITTEE OF THE CONFERENCE

VOL. LXXVIII, No. 2

MARCH, 1933

Subscription, $2.00 a year

January number, $1.00 Single number otherwise, 50 cents

Published bi-monthly during the school year

Publication Office:
450 Ahnaip St., Menasha, Wis.

Editorial Office: Kendall Green, Washington, D.C.

Entered as second-class matter at the Postoffice at Menasha, Wis. Acceptance for mailing at the special rate of postage provided for in the Act of February 28, 1925, authorized June 25, 1932.

AMERICAN ANNALS

OF

THE DEAF

ORGAN OF THE CONFERENCE OF EXECUTIVES OF AMERICAN SCHOOLS FOR THE DEAF, AND THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF

EDITED BY

IRVING S. FUSFELD

UNDER THE DIRECTION OF

PERCIVAL HALL, OF THE DISTRICT OF COLUMBIA; FRANK M. DRIGGS, OF UTAH; HERBERT E. DAY, OF MISSOURI; MADISON J. LEE, OF KENTUCKY; OSCAR M. PITTENGER, OF INDIANA; AND J. W. BLATTNER, OF OKLAHOMA.

EXECUTIVE COMMITTEE OF THE CONFERENCE

VOL. LXXVIII, No. 2
MARCH, 1933

AMERICAN ANNALS OF THE DEAF
VOL. LXXVIII MARCH, 1933 No. 2

THE CONFERENCE OF EXECUTIVES OF AMERICAN SCHOOLS FOR THE DEAF

REGULAR MEETING AT WEST TRENTON

The committee on the joint meeting on the education of the deaf to be held at West Trenton June 18 to June 23, inclusive, is proceeding with the preparation of an attractive program. The time allotted to any one organization is naturally limited. Parts of three afternoons have been assigned particularly to the Conference of Executives. Many interesting topics have been suggested to be taken up during this part of the program. The following topics have been thus far selected for papers and discussions:

1. A health program for our schools.
2. Academic program, including high school work.
3. A vocational program.
4. The question of tests to measure the ability and the progress of our pupils.

The business meeting scheduled for Thursday afternoon, June 22, in the tentative program as published in the ANNALS for January will be held on Tuesday afternoon, June 20, instead, with sessions on Monday and Thursday afternoons for papers and discussions on the topics mentioned above.

The joint committee has laid down the following definite rules in regard to papers and discussions:

No paper shall be presented except by the author personally.

All papers must be in print and ready for distribution one month before the meeting.

The speaker shall have only ten minutes to present his topic. He must present a résumé of his paper if the written form cannot be presented in the allotted time.

In discussions no one speaker will be allowed more than five minutes.

Preparations are going forward for an interesting program in the particular time allotted to the Conference of Executives of American Schools for the Deaf.

PERCIVAL HALL,
Chairman, Executive Committee.

EDUCATIONAL PROBLEMS[1]

Every school for the deaf in America or elsewhere was originally established because of certain outstanding difficulties encountered in the education of the deaf which require teachers qualified to apply methods almost unknown to instructors of the hearing. These difficulties have not yet been wholly eliminated, so there still remains a logical reason for the existence of private schools, day-schools, and state institutions where deaf pupils may receive their education under the most favorable conditions. In all such schools there are certain universal problems which confront the teachers of all grades. They deserve serious consideration in order that they may be definitely recognized, when encountered, and some united effort made toward their solution.

Speech and Speech-reading—First, probably, in the mind of every teacher, is the difficulty of making speech and speech-reading more practical. It is one thing for the teacher of a deaf child to understand what he says but quite another for strangers to do it. Deaf pupils need help in building up their oral knowledge and in retaining it from grade to grade so that they will have, eventually, a more reliable means of communication, comprehensible to them and to their hearing associates. After ten or twelve years of special instruction, the parents and friends of deaf graduates, and the graduates themselves, have sometimes found their efforts to communicate orally more or less unsatisfactory and have resorted to writing or gesticulations. This should not be. Such an elaborate, expensive system of instruction as has been developed in special schools should give deaf children a means of communication which they can successfully apply to all of their life-contacts. The public has enthusiastically recognized the accomplishments of oral instruction and every effort has been put forth not to differentiate between the psychology of the deaf and that of the hearing child. The teachers of deaf children have

[1] A paper read at a Teachers' Meeting of the Colorado School for Deaf and Blind, December, 1932.

adopted "Normality" as their slogan and have broadcast the thought that their pupils are just like any normal children. Any seeming discrepancies are linked with former faulty methods rather than mental handicaps. Teachers therefore face the difficulty of securing better results in speech and speech-reading in order to more nearly measure up to present-day expectations.

Comprehension of English—Second, another difficulty encountered by all teachers is how to help their pupils to get a clearer, more accurate comprehension of all written or spoken forms of English. Every teacher is familiar with that blank gaze which shows, all too plainly, that what has been said, or written, has not met with an intelligent response. The statement that deaf pupils in the advanced classes can use the textbooks prepared for hearing high school pupils with equal comprehensibility is, in many cases, contrary to the facts.

A further difficulty in comprehension arises if one insists upon action before the child fully grasps what it is that he is expected to do. He is not always responsible, however, for his slow reactions. Some people, even teachers, are habitually hazy in giving directions. Brevity and definiteness in clarifying facts are two welcome aids in the presentation of any subject under discussion.

Type-Errors in English—Third, difficulties are often encountered in eliminating through corrective work, drills, or some other means, what seem to be type-errors in original compositions and in reproductions. Whether or not they are errors "typical of the young deaf child," all teachers will agree that there are too many of them! Progress to new work is greatly retarded by having to call attention to the same errors which persist in reappearing from grade to grade, year after year. To correct them all detracts from opportunities to take up far more interesting projects. It becomes difficult to know what to ignore and what to see in attempting to lessen the number of these stumbling blocks to better English. Even the pupils of the advanced grades, eager to forge ahead and to complete the course, are sometimes held back because of errors in English which one feels

should have been mastered and eliminated from their thought-processes long before they reached the older classes.

The Partially Deaf—Fourth, among the difficulties here enumerated is the one of helping our partially deaf students, and those who have recently become deaf, to adjust themselves to a new environment and to new methods of education. They present a distinctly different group from many congenitally deaf children who never having heard, have been educated only in special schools. The majority of classes now contain pupils representing both groups. They are attempting to mingle as intellectual equals, to cover the same work, and to make about the same degree of progress. The teacher experiences a difficulty in dispensing an equal distribution of her efforts in assisting both groups. There is a natural tendency to speak more frequently to the children who are the most advanced in thought development, but one should guard against an unconscious neglect of the more isolated totally deaf child who sometimes fails to get his rightful share of class discussions in which he is vitally interested.

There are noticeable results from the mingling of these two groups. Sometimes they stimulate each other and the use of idiomatic English is encouraged. Occasionally a partially deaf pupil slows down his own mental speed and represses his initiative to adapt himself to his classmates who are pushing forward at their maximum speed. He becomes indolent in effort. His interest lags while he waits. In the other group, one often sees a look of silent envy, or unvoiced admiration at the ease with which the hard-of-hearing child masters some of his school propositions. To secure a proper balance of values for the two groups is no small problem for any teacher.

Original Thought Effort—Fifth, perhaps teachers universally face a difficulty in teaching deaf pupils to distinguish between pure memory work and original effort. Certain exercises require accurate reproductions, such as poems, hymns, songs, etc. Many recitations do not, yet deaf children are apt to seek from their teachers a terse statement of the facts

involved, which they memorize, word for word, often with very little knowledge of the ideas or the thought-development for which the lesson was given. Teachers should remember that an overdose of pure memory work is a most exhaustive mental strain which eliminates reason and free thought and greatly retards general mental progress.

Borderline Types—Sixth, every teacher recognizes the difficulties in classification and grading and that perfect grading is seldom accomplished in schools for the deaf. Intelligence tests in the public schools have apparently proved very successful in forming various mental groups best able to work together. These tests are being used more and more in schools for the deaf, and it is worthy of note that Dr. Percival Hall, president of Gallaudet College, encourages the use of standard educational tests regularly in the preparation of pupils for college work.

In addition to the groups of partially deaf children, of those recently deafened, and a congenital group, there is still another group found in almost every school for the deaf, usually designated as "specials." It takes an ingenious teacher with infinite patience to get results with these pupils. They are placed in classes which have an approximate level of intelligence, but each one goes on with his work more or less alone. Strange to say, some of these children are often eventually far more successful in life than some of their former teachers! Teachers should avoid, whenever possible, sidetracking pupils into this group. They should receive private tutoring if, by such help, they might be able to complete the regular course of study, and receive a diploma; but that diploma should stand for definite achievement and should not be given to pupils mentally unable to meet its requirements.

College Preparatory Work—A seventh problem encountered only in the advanced grades of schools for the deaf is the preparation of certain of the most promising pupils for the entrance examinations required for admission to Gallaudet College, the only national college for the deaf. This is very exacting work. In English, it involves a very wide field of uncertainty as to what to stress in the read-

ing of nine or ten books, in the study of several grammars, and in composition.

A recently published announcement by Dr. Hall states that the faculty of the college is considering the raising of the standard of admission for all candidates and the denying of admission to all candidates having conditions in both mathematics and English.

To summarize: Among the various difficulties encountered in teaching the different groups of children in schools for the deaf, the following have been mentioned and briefly discussed. They cover efforts to get:

1. Better speech and speech-reading.
2. A clearer comprehensive ability of English.
3. The elimination of so many errors in original composition.
4. Equal opportunities for all groups.
5. Less memory work—more individual thought effort.
6. Fewer "specials" and closer mental grading of classes.
7. More satisfactory college preparatory work.

IDA DONALD ELLIOTT,
Instructor in the Colorado School,
Colorado Springs, Colo.

RETURNS FROM A QUESTIONNAIRE OF THE OHIO DEAF-MUTE ALUMNI ASSOCIATION

Introduction

In presenting the following paper, "Returns from a Questionnaire of the Ohio Deaf-Mute Alumni Association," compiled by Dr. Charles Scott Berry, director of the Bureau of Special Education, Ohio State University, to the readers of the ANNALS, it is the desire of the officers of the Ohio Deaf-Mute Alumni Association to make a statement.

The questionnaire was sent out in our campaign to transfer the control of our state school from the welfare department to the educational department of the State of Ohio. The answers were not compiled in time for the various hearings in the Legislature on the matter, but the answers were examined by the Senate committee and they helped to justify our program to transfer the control to the educational department.

Since the state school has been under the control of the educational department, it has become more progressive in every way under the very trying circumstances pertaining to the depression. In presenting this interesting reading matter from Dr. Berry on our answers, the Alumni Association offers it with the hope that it may prove a contribution of educational value. The Association also will welcome comment from any who may be interested in order that it may be advised how to formulate suggestions that will do the greatest good for the

children yet to be educated. Rather than have the report stowed away in our office files and forgotten, we feel it would do more good if made a part of the professional record.

We wish to add a word of appreciation and acknowledgment of indebtedness to Dr. Charles Scott Berry, who very kindly assumed the task of having the data compiled. Dr. Berry, a national figure in the field of education, has gained prominence for his activities in special education. Recently, he served as chairman of the Committee on Special Classes, in the Section on Education and Training, of the late White House Conference on Child Health and Protection. We feel it, therefore, an honor that Dr. Berry undertook the preparation of this report, with the assurance, too, that it was in capable hands.

KREIGH B. AYERS, *President,*
Ohio Deaf-Mute Alumni Association,
1795 Malasia Road, Akron, Ohio.

In 1927, about 3,500 copies of the following letter and questionnaire were distributed among the deaf in Ohio and in other states.

Akron, Ohio
June 13, 1927

DEAR FRIENDS:

The Ohio Deaf-Mute Alumni Association is now taking a very active interest in the future happiness and welfare of the coming generations of deaf children, particularly respecting their education and instruction. The control of the institutions for the deaf of the state has just been successfully legislated away from the Department of Welfare to the Department of Education.

This is the first step necessary to bring about some mutual advantages for deaf pupils.

With this transfer it is very probable that some new improved methods of instruction will be offered or suggested and at least some change is hoped for which will result in an increase in efficiency.

Too long has the education of the deaf been directed, controlled and influenced almost completely by hearing persons.

Not that we desire to cast any aspersions on the good intentions of the theorists in this field of education, but we do know that despite our limited mental faculties we have pages from the practical book of experience that, if studied and considered, should be of great practical benefit to the present instructors for the primary benefit of all unfortunate deaf-mutes yet to be instructed. There are very few among us who have reached a place of political power or sufficiently recognized educational attainments that the single voice of the few can be heard against the great mass of powerful theoretical instructors. For that reason it is very important that we give a general expression of our ideas as a mass.

The enclosed questionnaire will enable your leaders not only to find out your ideas on these subjects but to present actual proof of the conclusions reached from your ideas.

We desire to represent you with your ideas, not to represent you with our ideas.

If you have any love, affection, regard or sympathy for another similarly afflicted, then immediately fill out the enclosed questionnaire and return it at once.

Very truly yours,
THE OHIO DEAF-MUTE ALUMNI ASSOCIATION
By Kreigh B. Ayers, President

QUESTIONNAIRE OF OHIO DEAF-MUTE ALUMNI ASSOCIATION

Date.....

Name.....

Address.....

1. Q. Did your deafness occur before learning to speak or after learning to speak? A. .....
2. Q. Where did you receive your education? A. .....
3. Q. By what method were you educated? A. .....
4. Q. When was education completed? A. .....
5. Q. Are you engaged in the business world? A. .....
   a. Number of years A. .....
   b. Occupation A. .....
6. Q. Have you continued to use speaking since the completion of your education, A. .....
   a. To what extent with hearing peaple? A. .....
   b. To what extent with deaf people? A. .....
7. Q. How much reliance do you place upon lip-reading or upon speech reading?

   A. .....
8. Q. Do you find it satisfactory or unsatisfactory?

   A. .....
9. Q. From your own advantages, mistakes and experiences, what recommendations have you to make relative to instructing the deaf-mute child?

   A. .....
10. Q. What, in your opinion, is your most valuable practical means of communication?

    A. .....

About 2,000 copies of this questionnaire were mailed out and the remaining 1,500 copies were distributed at a convention of the deaf in Denver, Colorado. Only 570 copies were filled out and returned. Of this number 87 could not be used because the replies were ambiguous, incomplete or meaningless.

It was evident from the nature of the replies that the deaf who attempted to fill out these 87 copies of the questionnaire could not read well enough to understand the questions.

Mr. Kreigh B. Ayers, president of the Ohio Deaf-Mute Association, who sent out the questionnaires, reports that many of the deaf said the questionnaire was too difficult for them to fill out.

Answers to Questions 1, 2, 3, 4, 6, 8, 9 and 10 of the Questionnaire are presented in the tables which follow. Replies to Questions 5 and 7 were too incomplete or ambiguous for tabulation.

Question 1. Did your deafness occur before learning to speak or after learning to speak?

TABLE I.
REPLIES TO QUESTION 1

	Number	Per cent
Deafness before speech	287	59
Deafness after speech	196	41
Totals	483	100

Question 2. Where did you receive your education?

TABLE II.
REPLIES TO QUESTION 2

Place	Number	Per cent
In Ohio	285	69
Outside of Ohio	128	31
Totals	413	100

Fifty-nine per cent of the deaf lost their hearing before they acquired speech (Table I).

Of the 413 who replied to Question 2 (Table II), 285 or 69 per cent were educated in Ohio.

The replies to Question 3 (Table III) show that 28 per cent were educated by the oral method, 32 per cent by the combined method, and 40 per cent by the manual method.

Question 3. By what method were you educated?

TABLE III.
REPLIES TO QUESTION 3

Method	Number	Per cent
Oral	136	28
Combined	152	32
Manual	195	40
Totals	483	100

TABLE III-a.
METHOD IN RELATION TO TIME OF DEAFNESS

Method	Deafness before speech		Deafness after speech		Grand Total	
	No.	%	No.	%	No.	%
Oral.....	65	23	71	36	136	28
Combined.....	78	27	74	38	152	32
Manual.....	144	50	51	26	195	40
Totals.....	287	100	196	100	483	100

In the case of those who became deaf before they acquired speech (Table III-a), 50 per cent were educated by the manual method as compared with 26 per cent of those who became deaf after the acquisition of speech.

A much larger percentage of those who left school prior to 1910 (Table III-b) was taught by the manual method, and a much smaller percentage by the oral method than of those who left school after 1910. It is interesting to note, however, that there was no marked change in the use of the combined method.

TABLE III-b.
METHOD IN RELATION TO TIME OF LEAVING SCHOOL

Method	Left school before 1910		Left school after 1910		Grand Totals	
	No.	%	No.	%	No.	%
Oral.....	28	13	84	43	112	27
Combined.....	66	30	68	35	134	33
Manual.....	125	57	42	22	167	40
Totals.....	219	100	194	100	413*	100

* Due to omission of date, 70 of the 483 questionnaires could not be used.

Among those educated in Ohio (Table III-c) the manual method was used to a greater extent and the combined method to a much less extent than among those educated in other states. However, the difference in the use of the manual method is not as great as indicated by the percentages given in Table III-c, due to the fact that a much larger

TABLE III-c1
METHOD IN RELATION TO PLACE OF EDUCATION

Method	Attended school in Ohio		Attended school outside of Ohio		Grand Totals	
	No.	%	No.	%	No.	%
Oral.....	80	28	32	25	112	27
Combined.....	73	26	61	48	134	33
Manual.....	132	46	35	27	167	40
Totals.....	285	100	128	100	413	100

percentage of those educated in Ohio left school before 1910 than of those who were educated in other states. But the marked difference in the use of the combined method cannot be accounted for in this way as only 5 per cent more of those who left school after 1910 were educated by the combined method than of those who left school before that date (see Table III-b).

Of the 413 who replied to Question 4 (Table IV), 219, or 53 per cent, left school before 1910, that is, completed their education more than 20 years ago.

Question 4. When was education completed?

TABLE IV.
REPLIES TO QUESTION 4

	Number	Per cent
Left school before 1910.....	219	53
Left school after 1910.....	194	47
Totals.....	413	100

It is surprising to find (Table V) that 53 per cent of the deaf make no use of speech with hearing people, and that 81 per cent make no use of speech with the deaf.

Of those who lost their hearing before they acquired speech (Table V-a) 65 per cent make no use of speech with the hearing and 82 per cent make no use of speech with the deaf, as compared with 36 per cent and 79 per cent, respectively, of those who became deaf after the acquisition of speech.

About one third (Table V-b) of those who were taught by the oral and combined methods make no use of speech with the hearing as compared with 86 per cent of those

Question 6. Have you continued to use speaking since the completion of your education?
a. To what extent with hearing people?
b. To what extent with deaf people?

TABLE V.
REPLIES TO QUESTION 6

Use of speech	Number	Per cent
Total number of cases.....	452	100
No use with hearing.....	238	53
No use with deaf.....	366	81

TABLE V-a.
USE OF SPEECH IN RELATION TO TIME OF DEAFNESS

Use of speech	Deaf before speech		Deaf after speech		Grand Totals	
	No.	%	No.	%	No.	%
Total number cases...	265	100	187	100	452	100
No use with hearing...	171	65	67	36	238	53
No use with deaf.....	218	82	148	79	366	81

TABLE V-b.
USE OF SPEECH IN RELATION TO METHOD

Use of speech	Oral		Combined		Manual		Grand Totals	
	No.	%	No.	%	No.	%	No.	%
Total number cases.....	135	100	150	100	167	100	452	100
No use with hearing.....	43	32	51	34	144	86	238	53
No use with deaf	94	70	116	77	156	93	366	81

taught by the manual method. Of those taught by the oral, combined or manual methods, 70 per cent, 77 per cent, and 93 per cent, respectively, make no use of speech with the deaf. No matter by which method they may have been in-

structed, it is obvious that the deaf make little use of speech in communicating with one another.

Only 25 per cent of the deaf (Table VI) find lip-reading satisfactory. This ranges from 35 per cent (Table VI-a) of those taught by the oral method to 11 per cent of those taught by the manual method.

Question 8. Do you find lip-reading or speech-reading satisfactory?

TABLE VI.
REPLIES TO QUESTION 8

Lip-reading	Number	Per cent
Lip-reading satisfactory	89	25
Lip-reading unsatisfactory	268	75
Totals	357	100

TABLE VI-a.
LIP-READING IN RELATION TO METHOD

Method	Oral		Combined		Manual		Grand Totals	
	No.	%	No.	%	No.	%	No.	%
Lip-reading satisfactory	46	35	32	25	11	11	89	25
Lip-reading unsatisfactory	85	65	95	75	88	89	268	75
Totals	131	100	127	100	99	100	357	100

Of those who lost their hearing before the acquisition of speech, 24 per cent (Table VI-b) find lip-reading satisfactory as compared with 26 per cent of those who lost their hearing after they had acquired speech.

It is interesting to note (Table VI-c) that 30 per cent of those who left school since 1910 find lip-reading satisfactory as compared with 18 per cent of those who left school before 1910. But the striking fact is the large percentage of the deaf who find lip-reading unsatisfactory regardless of time of deafness, method of instruction or time of leaving school.

TABLE VI-b.
LIP-READING IN RELATION TO TIME OF DEAFNESS

Time of deafness	Before speech		After speech		Grand Totals	
	No.	%	No.	%	No.	%
Lip-reading satisfactory.....	44	24	45	26	89	25
Lip-reading unsatisfactory...	143	76	125	74	268	75
Totals.....	187	100	170	100	357	100

TABLE VI-c.
LIP-READING IN RELATION TO TIME OF LEAVING SCHOOL

Time of leaving school	Before 1910		After 1910		Grand Totals	
	No.	%	No.	%	No.	%
Lip-reading satisfactory.....	27	18	47	30	74	24
Lip-reading unsatisfactory...	120	82	111	70	231	76
Totals.....	147	100	158	100	305	100

It is surprising to find that only 4 per cent (Table VII) of the deaf recommend the oral method, while 41 per cent recommend the combined method, and 32 per cent the manual method.

It is even more surprising to learn that only 6 per cent (Table VII-a) of those educated by the oral method recom-

Question 9. From your own advantages, mistakes and experiences, what recommendations have you to make relative to instructing the deaf-mute child?

TABLE VII.
REPLIES TO QUESTION 9

Recommendations	Number	Per cent
Oral method.....	15	4
Combined method.....	167	41
Manual method.....	130	32
Fit method to the child.....	44	11
Miscellaneous	47	12
Totals.....	403	100

TABLE VII-a.

RELATION BETWEEN RECOMMENDATIONS AND METHODS BY WHICH THOSE MAKING REPLY WERE INSTRUCTED

Recommendations	Oral		Combined		Manual		Grand Totals	
	No.	%	No.	%	No.	%	No.	%
Oral method....	7	6	3	2	5	4	15	4
Combined method.....	44	36	79	56	44	31	167	41
Manual method.	42	35	25	18	63	44	130	32
Fit method to child.....	13	11	16	12	15	10.5	44	11
Miscellaneous...	15	12	17	12	15	10.5	47	12
Totals.....	121	100	140	100	142	100.	403	100

mend its use, although in the case of the combined and manual methods 56 and 44 per cent, respectively, recommend their use. However, a large percentage of each of the three groups recommends the use of the combined method.

In Table VII-b the recommendations are tabulated according to time of deafness, whether before or after the ac-

TABLE VII-b.

RELATION BETWEEN RECOMMENDATIONS AND TIME OF DEAFNESS

Recommendations	Deaf before speech		Deaf after speech		Grand Totals	
	No.	%	No.	%	No.	%
Oral method.....	12	5	3	2	15	4
Combined method....	85	37.5	82	47	167	41
Manual method.....	85	37.5	45	25	130	32
Fit method to child...	23	10	21	12	44	11
Miscellaneous.....	23	10	24	14	47	12
Totals.....	228	100	175	100	403	100

quisition of speech. Here we find large percentages in both groups recommending the combined and manual methods, but only a small percentage in either group recommending the oral method. It may not be surprising that 37 per cent of those who lost their hearing before they acquired speech recommend the manual method, but it is a little surprising that 25 per cent of those who lost their hearing after they

had acquired speech should also recommend the manual method.

Very few of the deaf find speech their most valuable practical means of communication since only 17 per cent (Table VIII) name the oral and combined methods. This is not surprising since we have already seen that 53 per cent (Table V-b) make no use of speech with the hearing and 81 per cent make no use of speech with the deaf. Signs, writing and signs, and writing are named by 60 per cent of the deaf as their most valuable practical means of communication.

Question 10. What, in your opinion, is your most valuable practical means of communication?

TABLE VIII
REPLIES TO QUESTION 10

Most practical means of communication	Number	Per cent
Oral method	25	6
Combined method	49	11
Manual method	100	23
Signs	91	21
Writing	94	21
Writing and signs	79	18
Totals	438	100

In the case of those who were educated by either the oral or combined method, only 22 per cent (Table VIII-a) name these methods as the most valuable practical means of communication. Whether trained by the oral, combined or manual method the majority of the deaf name signs, writing, or writing and signs as the most valuable practical means of communication.

In the case of those who became deaf before they acquired speech (Table VIII-b) 14 per cent, as compared with 21 per cent of those who became deaf after they had acquired speech, name either the oral or combined methods as the most valuable practical means of communication.

Regardless of the time of the acquisition of deafness, or of the method of instruction, speech is named by only a small percentage of the deaf as their most valuable practical means

TABLE VIII-a.
RELATION BETWEEN PRACTICAL MEANS OF COMMUNICATION AND METHOD

Most valuable practical means of communication	Oral		Combined		Manual		Grand Totals	
	No.	%	No.	%	No.	%	No.	%
Oral method....	11	9	13	9	1	1	25	6
Combined method.....	16	13	19	13	14	8	49	11
Manual method.	27	22	26	17	47	28	100	23
Signs.....	26	22	20	13	45	27	91	21
Writing.....	29	24	38	25	27	16	94	21
Writing and signs.....	12	10	34	23	33	20	79	18
Totals.....	121	100	150	100	167	100	438	100

TABLE VIII-b.
RELATION BETWEEN PRACTICAL MEANS OF COMMUNICATION AND TIME OF DEAFNESS

Most valuable practical means of communication	Deaf before speech		Deaf after speech		Grand Totals	
	No.	%	No.	%	No.	%
Oral method.....	11	4	14	8	25	6
Combined method....	25	10	24	13	49	11
Manual method.....	68	26.5	32	18	100	23
Signs.....	55	21	36	20	91	21
Writing.....	45	17.5	49	27	94	21
Writing and signs....	54	21	25	14	79	18
Totals.....	258	100	180	100	438	100

of communication. On the other hand, signs alone are named by 21 per cent of the deaf as their most valuable practical means of communication.

CONCLUSION

This report shows that the majority of the deaf who filled out this questionnaire make no use of speech either with the hearing or with the deaf, and that three-fourths of them find lip-reading unsatisfactory.

It is probably a fair presumption that those who filled out and returned the questionnaire make at least as much use

of speech and lip-reading as those who failed to return the questionnaire.

The returns from this questionnaire suggest the desirability of a careful study of the alumni of the different types of schools and classes for the deaf in order to determine to what extent modern education is actually doing for the deaf what it is supposed to do.

CHARLES SCOTT BERRY,
Director, Bureau of Special Education,
School of Education, Ohio State University,
Columbus, Ohio.

OUR SCHOOLBOY PATROL[1]

We have introduced into our school this year the boy patrol. This work is still in the early stage of development but has been working out wonderfully well.

We have four very dangerous crossings within our school campus. It is quite necessary that care be taken while our pupils are passing from dormitory to school and from school to their living quarters. Heretofore we have made it the duty of certain teachers and supervisors to look after the pupils and see them safely across these places. Now our boy patrol is attending to this work in a very efficient manner. It is a pleasure to see these boys hold up the traffic just long enough for the kiddies who are crossing to gain the opposite curb.

Patrol members are selected for leadership and trustworthiness. The patrol officers are appointed for the school year. Other members may be changed at intervals of six weeks. The patrol is sworn in by a member of the city police department.

We have four members and a captain and their work has been very satisfactory. The boys are always on the job, attentive and thoroughly interested. They have the regular insignia worn by city patrol members. These consist of the

[1] Mr. Thomas submits with this brief paper a set of tables concerning accidents involving children between the ages of one and fifteen years. This tabular matter is too elaborate for reproduction here, but it suggests that such material, which may be obtained from the offices of local automobile clubs, could serve usefully in correlating the subject of safety with that of arithmetic.—*Editor,* ANNALS.

Sam Browne belts and shoulder straps made of 2-inch material and worn at all times while on duty. Each has a badge with "AAA" stamped across the face of it.

The idea of this patrol is not only to safeguard our pupils while on our school grounds but also to teach them to be careful when on the streets at all times and places.

J. WHITE THOMAS,
Principal in the Michigan School,
Flint, Michigan.

DO THE DEAF SEE MORE THAN THOSE WITH ALL THEIR SENSES?[1]

Do the deaf see more than those with all their senses? An odd question! Why should it be generally believed that the deaf see more? No one has as yet succeeded in discovering any difference between the eye of the deaf person and the eye of one possessing all his faculties. Among the deaf are certainly to be found just as many persons who are either far- or near-sighted, or who wear glasses, as among those who are not deaf. And yet these far-sighted and near-sighted individuals see more than do average hearing persons.

Now it has often been authentically observed that the deaf have a very keen memory for persons and pictures, that they quickly "see" even a slight change in a room or in the apparel of an acquaintance, that they more surely and more quickly become aware of an insignificant alteration in their customary surroundings than do those with all their senses. What is the basis for this singular phenomenon? The explanation is to be sought in the last analysis in a fundamental law of nature. Were we to cut off some of the branch-sprouts of a fruit tree, the tree would not on that account perish; on the contrary, the remaining branches grow more quickly and more sturdy, and yield extraordinarily beautiful fruit. If we were to cut off a segment from an earthworm, the creature soon grows a new part in its place. If

---

[1] "Sehen die Gehörlosen mehr als die Vollsinnigen?" An article translated, and reproduced with permission, from *Der Deutsche Gehörlose,* Munich, Bavaria, May 28, 1932.

we receive an injury on the arm, the wound soon closes and a new skin grows over it.

What happens then, when—as is the case with most of those who are deaf—some illness impairs the function of the inner ear, the cochlea for instance? In this case, also, does a new cochlea grow out? Does there develop a new organ of hearing? No! No one has ever yet succeeded in repairing such damage and restoring to the deaf person his hearing. The inner ear is too complicated and too delicate a structure to be reestablished by a second growth. The individual remains deaf, it is true, but he learns therefore to observe more closely and more rapidly. The loss of hearing is compensated for by a "better seeing."

How may the fact of this better visual power on the part of the deaf be determined? In order to answer this question, the writer has carried out experiments with many deaf children in Munich and Straubing, a few of which may be here described. These children were shown a number of simple pictures; for instance, a boy running across a small wooden bridge with a dog following him. The boy had a hat on his head. There were also a brook, a hill, and the sun. The picture was displayed for five seconds, and then put down, after which the children were asked to draw the picture from memory.[2] This was done with both deaf and hearing children. It was soon noted that the deaf children had observed much more in the picture than did the others. All of the deaf children knew that the boy had a hat on his head, while only half of the others remembered that fact, and also that the bridge had a railing and that the sun was in the sky. Several of the deaf children also drew correctly the collar of the dog; a fact which none of the other school children noted. In many similar experiments the same results were always obtained; the deaf children could recall many more details than other children could. If the pictures were exposed for only two seconds, the hearing children be-

[2] This may be considered a commendable approach to the experiment since it eliminates the question of the language factor. Editor, ANNALS.

came confused while the deaf, on the contrary, even then observed much.

In many other experiments nine and more meaningless diagrams were displayed half a minute. The symbols or signs connected with each of the figures had to be retained in the mind. At this task also the deaf children excelled over the children from the elementary and high schools and even over university students. From such evidence there is no doubt that the memory for visual impressions—in scientific terms it is called visual imagery—is more highly developed among the deaf than among persons with normal hearing.

But do the deaf really see more, that is, can they in the same period of time grasp more details than those with all their sensory faculties? In very small time-limits for observation, say one-tenth second, the ordinary person as a rule can distinctly see and differentiate five elements; for instance, five letters, five numbers, five dots, etc. With such a limited period for observation does the deaf person observe more than the average person? To clear up this question, we made use of a *tachistoscope;* this is a simple apparatus with a shutter such as we are familiar with in the camera. The observer looks through an aperture at a white screen on which can be shown numbers, letters, dots, etc. After the shutter is set, the observer can look at the dots a tenth, a fiftieth or a hundredth of a second. That is a very limited period for observation. The writer has obtained results from more than a thousand trials with this apparatus with deaf and hearing persons. As a rule, dots of various sizes and arrangements were shown. The observer then had to state what and how many he saw. In these experiments the deaf were markedly superior to children from the ordinary schools and also when compared with higher students. With one twenty-fifth second, 93 per cent of all the deaf children could recognize all the figures correctly, as against 42 per cent of the hearing subjects. If we consider a shorter period for observation, the superiority of the deaf becomes all the more pronounced. With one fiftieth second, 75 per cent of the deaf, as against only 10 per cent of those who could hear,

made correct answer. From this we may conclude that the deaf person observes more in the same time than do others. Because of this finer acuity and because of continuous practice, his visual imagery is superior to that of hearing persons.

The deaf person is, because of the lack of the sense of hearing, at a disadvantage in many respects. But in the divine plan of nature that dominates all life is fixed the law of compensation, the law of balance. The individual seeks to participate in the play of life that goes on about him; he desires to make the world part of himself, to live it and to fashion it. In this process of making the environment part of himself the deaf person is at the start handicapped. But through constant use here also a compromise is effected; the deaf person sees more, and in many respects observes more quickly, than do those in the possession of all their senses. The distinguished work of our deaf painters and sculptors, as well as the precise artisanry of deaf handworkers, attests to this fact. So also in those struck by deafness does the rule of compensation hold true, the struggle for individuality, toward harmony with nature—a final manifestation of the universal and eternal divine justice.

R. HOFMARKSRICHTER,
Munich, Bavaria.

BEBANCHI—THE PANTOMIME LANGUAGE OF THE HAUSA DEAF AND DUMB[1]

The Hausa's cheerful fortitude in adversity—seen so often in the East African campaign—is never better exemplified than in the case of the blind, the deaf and the dumb. While the average white man feels inexpressibly shocked if any mention or indication should inadvertently be made of such infirmities in the presence of the unfortunate ones, a spade is invariably a spade to the African and, if a person is blind, deaf or dumb, well, he is so, and there is no more to be said about it. Not that frank references, in their presence, to

[1] Reproduced, with permission, from the *West African Review*, Liverpool, June, 1932.

the "blind boy," the "deaf and dumb woman with the goitre," or the "leper with no toes" and so forth betoken a callous indifference to their feelings, because no one, from highest to lowest, could actually be more thoughtful for the afflicted than the African; he would, in any case, be just as outspoken about the peculiarities of the hale and hearty. The result is that the afflicted take their infirmities very much as a matter of course and are probably very much happier in consequence. Their afflictions come from Allah and are, therefore, nothing of which to be ashamed or about which to have feelings. No one would be more annoyed, for instance, than the blind, if at feasts and sports a chief were tactless enough to omit that mirth-provoking but, to our eyes, rather terrible spectacle, the chicken scramble for the sightless. The point of view of the blind man would be, "Well, if Ardu is fool enough to dress himself up in rags and amuse the people by clowning, or if Gumbo doesn't mind wrestling with a man much bigger than himself and biting the dust, why should I mind making a fool of myself chasing a chicken I can't see? It raises a laugh and there is every chance that I will get a chicken."

Regarding life and its infirmities, then, as one huge joke, it is not surprising that the Hausa has made of the deaf and dumb sign language a most amusing pantomime and at the same time a most graphic means of communication. Some of the deaf and dumb are, incidentally, wealthy traders and carry on their businesses in a manner that is as extraordinary as it appears to be successful.

The majority of the people being illiterate, no attempt is, naturally, made to form words, and the whole conversation is carried on in dumb show. There are, however, certain conventional signs which must be known, otherwise the subsequent gesticulations lose their point; just as a spoken sentence often loses its point unless one knows its context. These conventional signs refer to the most simple characters met with in one's daily existence. To take a few of them in their simplest form; a man is always shown by the pulling downwards and stroking of an imaginary beard, while the interlocking of the first fingers of either hand—the sign of

marriage—denotes a married woman. An unmarried girl is denoted by the touching of imaginary breasts, while a child is shown by extending the palm downwards to the approximate height of a child. Imaginary writing by the right index finger on the palm of the left, followed by expectoration in representation of ablutions, denotes a Mallam or learned man. The typical slenderness of the Fulani and his devotion to his cattle are shown by encircling the left arm in the right hand, pointing away to the bush and then placing the hands on the head in imitation of horns. All chiefs are represented, first by the winding of an imaginary turban round the head, and then pulling it down in front, in imitation of a Hausa chief about to speak; an important chief —a Staff of Office holder—is given the additional pantomimic dignity of a staff of office—a twig or a piece of stick —and a dignified strut; the more important the chief the more dignified the strut.

The conventional sign for all Europeans, male or female, is amusing, and consists of pulling down an imaginary moustache at each corner of the mouth—probably in remembrance of the military officers of the Royal Niger Constabulary and the West African Frontier Force in the early years of the twentieth century, when moustaches were the vogue.

With a knowledge of these simple conventional signs it is not difficult to imagine how the details of any character may be worked up. The European conventional sign followed by the pulling of the first two fingers denotes a European woman, while the pulling of the two first fingers followed by the pointing to the teeth would denote a woman of the Yoruba or other tribe which files its teeth. A political officer is shown first by the conventional sign for the European followed by the winding of an imaginary turban (as for a chief) and a pompous walk. A military officer has the conventional sign followed by the rolling of imaginary puttees and the levelling and firing of an imaginary rifle; after this the performer looks at his imaginary shoulder straps and counts on his fingers the number of stars of a captain or lieutenant, or shows by pantomimic signs the senior officers,

the general rule being that the more senior the officer the more pantomimic is the appropriate description. An English non-commissioned officer is described like an officer until after the levelling and firing of the rifle, but then he looks at his shoulder straps and shakes his head ruefully because no pips are there, and marches quickly forward. A police officer is acted in the same way as a military officer until after the rolling of the puttees, but then he suddenly claps an imaginary handcuff with his right hand on his left.

To move further up the official scale, the Governor is always depicted in this comic pantomime by the usual conventional sign followed by the winding of an imaginary, very large turban; the narrator then stands up, blows an imaginary bugle, beats an imaginary drum and presents arms.

The different little eccentricities of the characters are seldom omitted. Some of the illustrations which are employed are extremely subtle and sometimes not at all complimentary.

These, then, are a few of the better known characters in the deaf and dumb pantomime of the Hausa people; there are many others, some extremely vulgar and others very unkind. The narrator, having once got his characters on to the stage, as it were, carries on the rest of his performance by extremely clever dumb show in which every form of facial expression and gesticulation comes into play; and a couple of expert performers going at it hammer and tongs describing even the most simple event, can provide one of the best half-hour's entertainments to be seen anywhere in Africa.

P. G. HARRIS.

AN ANALYSIS OF THE FIRST-YEAR VOCABULARIES OF THE PUBLIC RESIDENTIAL SCHOOLS FOR THE DEAF IN THE UNITED STATES—II[1]

II

Analysis of Data *(continued)*

C. *Contents of Vocabularies*

The 558 nouns represent a selection of words from "afternoon" to "zoo." A number of words had been introduced, apparently, because of certain local conditions, *e.g.*, "grits." All the words were tabulated, by parts of speech, for each school and for each method of teaching. This gave an exact list of nouns, verbs, etc., taught for lip-reading, speech, writing and print-reading and the number of schools in which each was taught. For example, "ball" was taught in forty-nine schools for speech; in fifty (or all reporting) schools for- lip-reading; in forty-two schools for writing; and in twenty-eight schools for print-reading. An attempt was made to find some statistical means of combining these four scores so as to get a composite score which would serve as a basis for ranking the words in order of frequency of appearance. No adequate statistical means was found so the scores were simply combined and their sum used as the composite score. Thus "ball" has a composite score of 169. A complete alphabetical list of all the nouns occurring in the fifty vocabularies studied and their composite scores will be found in Table VI. Similar lists for verbs and the other parts of speech will be found in Tables VII and VIII, respectively.

Such a composite score may, however, at times give a slightly erroneous impression as to the frequency of any one word. For example, a word occurring in one school but

---

[1] Continued from the Annals for September, 1932, pages 304-314. In the first section of this study, Dr. Groff gave an analysis of the size and grammatical form of the vocabularies taught in the first year. She found a grand total of 978 different words in all the schools studied and by all methods—namely, speech, lip-reading, writing and print-reading—comprising 558 nouns, 179 verbs and 241 among the other parts of speech.

taught by all four methods would receive a value of four. Likewise, a word occurring in four schools but taught by one method only, would receive a score of four. In order to correct for this, frequency tables and distribution tables were made for all the words. All the words taught in one to ten schools were grouped under the heading "1-10." All the words taught in eleven to twenty schools were grouped under that heading, and so on. These lists were made for the various parts of speech as well as for the various methods. The respective tables for frequency of nouns, for frequency of verbs and for the other parts of speech will appear in subsequent sections of this report.

After the composite scores had been obtained, they were arranged in rank order, the highest score receiving a rank of one. The rank of any word will be found in Tables VI, VII and VIII, following the composite score. If a word had been taught in all schools by all methods it would have received a score of 200 (50 x 4). However, no word was taught in all schools by all methods. The highest score was 169 and belongs to the word "ball," which then gets a rank of *one*.

The original plan was to compare the ranks of the words in the vocabularies being studied with the ranking of similar words by Gates.[2] However, this was impractical as Gates' list is based on a different number of words. Consequently, the similarity of the two vocabularies could only be pointed out. This was done by marking each word in the alphabetical list, that is also in Gates' list, with an asterisk. Of the 558 nouns, 318 or 57 per cent are found in Gates' list; of the 179 verbs, 132 or 74 per cent are included, and for the remaining parts of speech we find 131 similar words or 54 per cent.

The value or significance of these data can only be determined when compared with similar data for hearing children and when various related facts are treated more in detail. The next chapter will deal with such interpretation, evaluation and conclusions.

---

[2] Gates, Arthur I., "A Reading Vocabulary for Primary Grades."

TABLE VI

ALPHABETICAL LIST OF NOUNS SHOWING COMPOSITE SCORE AND RANK

Words marked with an asterisk (*) are found in Gates' list of 1,500 words

	Comp. Score	Rank			Comp. Score	Rank	
1. afternoon	4	389	*	52. bracelet	2	465.5	
2. airplane	4	389	*	53. bread	120	41.5	*
3. airship	4	389		54. breakfast	12	215.5	*
4. apple	116	46	*	55. bridle	4	389	
5. apron	14	203	*	56. broom	9	245.5	*
6. arm	165	3.5	*	57. brother	24	148.5	*
7. auto	87	69	*	58. brush	59	91.5	*
8. baby	155	9	*	59. bucket	4	389	
9. back	12	215.5	*	60. bud	10	235	
10. bag	4	389		61. buffalo	4	389	
11. ball	169	1	*	62. bug	1	517.5	*
12. balloon	23	153.5	*	63. bun	12	215.5	
13. banana	47	104	*	64. bunny	2	465.5	
14. barber	3	447.5		65. bureau	1	517.5	
15. barn	26	138.5	*	66. bus	4	389	
16. barrel	4	389		67. bush	4	389	
17. basket	58	93.5	*	68. butter	57	96	*
18. bat	14	203		69. butterfly	37	119.5	*
19. bath	9	245.5	*	70. button	11	225.5	
20. bathrobe	1	517.5		71. cabbage	2	465.5	*
21. bathroom	2	465.5		72. cabinet	1	517.5	
22. bathtub	15	193		73. cake	120	41.5	*
23. beads	9	245.5	*	74. calendar	3	447.5	
24. bean bag	22	157		75. calf	19	172.5	*
25. beans	8	264	*	76. camel	5	325.5	
26. bear	6	302.5	*	77. can	4	389	*
27. bed	67	84.5	*	78. candy	129	32.5	*
28. bedroom	3	447.5		79. cap	113	53	*
29. bee	59	91.5	*	80. car	137	29.5	*
30. bell	34	124.5	*	81. card	24	148.5	*
31. belt	21	162		82. cart	34	124.5	*
32. bench	10	235		83. carpet	1	517.5	
33. bill	5	325.5	*	84. carrot	1	517.5	*
34. bird	125	37.5	*	85. cat	150	15	*
35. birdhouse	1	517.5		86. ceiling	1	517.5	
36. birthday	20	167.5	*	87. cent	45	105.5	*
37. biscuit	4	389		88. cereal	2	465.5	
38. blackberry	2	465.5		89. chair	82	71	*
39. blackboard	1	517.5		90. chalk	10	235	*
40. blanket	1	517.5		91. chapel	7	285	
41. bloomers	8	264		92. chart	11	225.5	
42. blouse	62	88		93. cheek	5	325.5	
43. blueberry	2	465.5		94. cheese	5	325.5	*
44. board	1	517.5	*	95. cherry	2	465.5	*
45. boat	125	37.5	*	96. chicken	44	108	*
46. bonnet	4	389	*	97. chiffonier	1	517.5	
47. book	145	18.5	*	98. chin	10	235	
48. bottle	4	389	*	99. Christmas	15	193	*
49. bowl	26	138.5	*	100. Christmas tree	18	179	
50. box	115	49	*	101. churn	4	389	
51. boy	167	2	*	102. church	14	203	*

ALPHABETICAL LIST OF NOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank		Comp. Score	Rank
103. circus	8	264 *	157. eyebrow	2	465.5
104. clock	18	179 *	158. eyelash	1	517.5
105. closet	7	285	159. father	145	18.5*
106. cloth	5	325.5*	160. face	67	84.5*
107. cloud	12	215.5*	161. fan	107	58 *
108. coat	139	25.5*	162. farm	4	389 *
109. cocoa	14	203 *	163. feather	11	225.5*
110. cocoanut	8	264	164. feet	31	130.5*
111. coffee	8	264 *	165. fence	5	325.5*
112. collar	6	302.5*	166. fern	4	389
113. comb	129	32.5*	167. finger	25	143 *
114. cone	4	389	168. finger nail	1	517.5
115. cooky	21	162 *	169. fire	11	225.5*
116. corn	11	225.5*	170. fish	153	11 *
117. corner	4	389 *	171. flag	89	66 *
118. cow	158	6.5*	172. floor	78	77 *
119. cracker	8	264 *	173. flower	139	25.5*
120. cradle	1	517.5*	174. flower bed	1	517.5
121. crayon	21	162 *	175. fly	55	99.5*
122. cream	4	389 *	176. fog	4	389
123. crib	1	517.5	177. foot	118	43.5*
124. cry baby	2	465.5	178. football	32	128
125. cuff	1	517.5	179. fork	150	15 *
126. cup	112	55 *	180. fountain pen	1	517.5
127. cupboard	1	517.5*	181. fox	4	389 *
128. daddy	9	245.5*	182. frog	36	122 *
129. day	23	153.5*	183. funny paper	1	517.5
130. deer	8	264 *	184. fur	4	389 *
131. desk	21	162 *	185. galoshes	1	517.5
132. dime	4	389	186. garden	4	389 *
133. dining room	1	517.5	187. garters	6	302.5
134. dinner	12	215.5*	188. girl	150	15 *
135. dish	7	285 *	189. glass	16	186.5*
136. doctor	4	389 *	190. glasses	4	389
137. dog	141	22 *	191. glove	13	209.5
138. doll	138	28 *	192. goat	67	84.5*
139. dollar	4	389 *	193. God	24	148.5*
140. donkey	5	325.5*	194. goodbye	78	77 *
141. door	78	77 *	195. good morning	18	179
142. doughnut	6	302.5	196. good night	1	517.5
143. drawer	4	389	197. goose	18	179 *
144. dress	91	64 *	198. grapefruit	1	517.5
145. dresser	1	517.5	199. grapes	5	325.5*
146. drum	39	115 *	200. grass	49	102 *
147. duck	81	72.5*	201. gravy	9	245.5
148. ear	67	84.5*	202. greenhouse	1	517.5
149. Easter	9	245.5*	203. grits	1	517.5
150. Easter egg	4	389	204. ground	4	389 *
151. egg	48	103 *	205. gum	31	130.5*
152. elbow	14	203	206. gun	60	90 *
153. elephant	10	235 *	207. hair	69	82 *
154. evening	1	517.5*	208. hairbrush	8	264
155. eraser	14	203	209. hall	6	302.5*
156. eye	139	25.5*	210. Hallowe'en	1	517.5

ALPHABETICAL LIST OF NOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank		Comp. Score	Rank
211. ham	2	465.5	265. lollypop	4	389
212. hammer	9	245.5*	266. lullaby	3	447.5
213. hand	55	99.5*	267. macaroni	1	517.5
214. handkerchief	32	128 *	268. mamma	23	153.5*
215. hat	79	75 *	269. man	158	6.5*
216. hay	4	389 *	270. mantel	1	517.5
217. head	18	179 *	271. marble	76	79 *
218. heart	4	399 *	272. match	4	389
219. hello	1	517.5	273. mattress	1	517.5
220. hen	35	123 *	274. meat	88	68 *
221. hoe	8	264	275. medicine	4	389
222. hole	4	389 *	276. men	3	447.5*
223. home	121	40 *	277. mice	3	447.5*
224. hook	4	389	278. middy blouse	1	517.5
225. hoop	22	157 *	279. milk	105	61
226. horn	61	89 *	280. mirror	15	193
227. horse	126	36 *	281. mitten	5	325.5*
228. hose	7	285	282. money	23	153.5*
229. hospital	9	245.5	283. monkey	8	264 *
230. house	123	39 *	284. month	25	143 *
231. ice	8	264 *	285. moon	118	43.5*
232. ice cream cone	5	325.5	286. mop	4	389
233. ice cream	71	81 *	287. morning	4	389 *
234. ink	4	389 *	288. moth	8	264
235. iron	4	389 *	289. mother	150	15 *
236. jacket	1	517.5*	290. mount	4	389
237. jack rock	1	517.5	291. mouse	127	34.5*
238. jello	1	517.5	292. mouth	154	10 *
239. jelly	4	389	293. movies	19	172.5
240. jelly beans	1	517.5	294. moving picture	4	389
241. jump rope	2	465.5	295. muff	24	148.5
242. key	38	117 *	296. muffin	1	517.5
243. kiddie kar	1	517.5	297. mug	3	447.5
244. kite	65	87 *	298. mule	1	517.5
245. kitchen	1	517.5*	299. nail	4	389 *
246. kitten	4	389 *	300. napkin	6	302.5
247. knee	32	128 *	301. neck	15	193 *
248. knife	152	12 *	302. necktie	4	389
249. lamb	21	162 *	303. needle	5	325.5*
250. lamp	7	285 *	304. nest	6	302.5*
251. lap	2	465.5*	305. newspaper	1	517.5
252. lapboard	1	517.5	306. nickel	4	389 *
253. leaf	41	111 *	307. night	4	389 *
254. leg	40	112.5*	308. nightgown	1	517.5*
255. lemon	12	215.5	309. nightshirt	1	517.5
256. lemonade	4	389	310. nose	106	59.5*
257. letter	100	62 *	311. nurse	9	245.5
258. letter box	4	389	312. nut	99	63 *
259. lettuce	1	517.5*	313. oatmeal	2	465.5
260. light	6	302.5*	314. office	2	465.5*
261. lightning	5	325.5	315. onion	4	389 *
262. lion	5	325.5*	316. orange	57	96 *
263. lip	6	302.5*	317. overalls	2	465.5
264. locker	2	465.5	318. overcoat	4	389

ALPHABETICAL LIST OF NOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank		Comp. Score	Rank
319. owl	6	302.5*	373. punch	3	447.5
320. pail	18	179 *	374. puppy	4	389 *
321. pan	15	193 *	375. purse	26	138.5
322. pancake	1	517.5*	376. rabbit	110	56 *
323. pants	7	285	377. radiator	2	465.5
324. papa	15	193 *	378. radio	5	325.5
325. paper	89	66 *	379. rag	4	389 *
326. park	3	447.5*	380. rain	25	143 *
327. party	26	138.5*	381. rainbow	4	389
328. paste	4	389	382. raincoat	4	389
329. pasture	4	389	383. raisin	2	465.5
330. pea	5	325.5*	384. rake	4	389 *
331. peach	8	264 *	385. rat	14	203 *
332. peanut	16	186.5*	386. ribbon	14	203 *
333. pear	11	225.5*	387. rice	2	465.5*
334. pen	7	285 *	388. ring	44	108 *
335. pencil	108	57 *	389. river	4	389 *
336. pencil box	4	389	390. road	4	389 *
337. penny	4	389 *	391. rocking-chair	1	517.5
338. pepper	10	235	392. rocking-horse	1	517.5
339. perfume	5	325.5	393. roller skates	1	517.5
340. phone	4	389	394. rolls	5	325.5*
341. piano	6	302.5*	395. room	8	264 *
342. pickle	1	517.5	396. rooster	6	302.5*
343. picnic	4	389 *	397. rope	8	264 *
344. picture	8	264 *	398. rubber	7	285
345. pie	127	34.5*	399. rubbers	14	203 *
346. pig	57	96 *	400. rug	3	447.5*
347. pillow	6	302.5	401. ruler	4	389
348. pillowcase	1	517.5	402. saddle	4	389
349. pin	58	93.5*	403. salt	21	162 *
350. pinwheel	1	517.5	404. Santa	3	447.5*
351. pipe	25	143	405. Santa Claus	39	115 *
352. pistol	4	389	406. sauce	1	517.5
353. pitcher	7	285	407. saucer	19	172.5
354. plant	8	264 *	408. saw	10	235 *
355. plaster	4	389	409. scarf	7	285
356. plate	45	105.5	410. school	27	136 *
357. playground	1	517.5	411. scissors	14	203 *
358. playroom	1	517.5	412. scooter	1	517.5
359. plum	3	447.5*	413. screen	4	389
360. pocket	10	235 *	414. seal	4	389
361. pointer	16	186.5	415. seed	8	264 *
362. pond	4	389 *	416. shade	1	517.5
363. pony	8	264 *	417. sheep	139	25.5*
364. pop	4	389	418. sheet	5	325.5
365. popcorn	8	264	419. sheik	4	389
366. porch	2	465.5*	420. shelf	17	183.5
367. postcard	17	183.5	421. shell	15	193 *
368. potato	37	119.5*	422. shirt	15	193 *
369. present	1	517.5*	423. shoe	157	8 *
370. pudding	1	517.5*	424. shoe string	3	447.5
371. pump	4	389	425. shop	5	325.5*
372. pumpkin	4	389 *	426. shoulder	9	245.5

ALPHABETICAL LIST OF NOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank		Comp. Score	Rank
427. shovel	4	389	481. tennis racket	1	517.5
428. show	19	172.5*	482. Thanksgiving	1	517.5*
429. sidewalk	9	245.5*	483. thimble	4	389
430. sister	24	148.5*	484. thread	5	325.5
431. sitting room	1	517.5	485. thumb	163	5
432. skate	4	389 *	486. thunder	4	389
433. skirt	4	389	487. tie	140	23 *
434. sky	51	101 *	488. tiger	4	389
435. slate	29	133.5	489. toast	6	302.5
436. sled	20	167.5*	490. toe	75	80 *
437. slip	4	389	491. toilet	1	517.5
438. slipper	5	325.5	492. tomato	4	389
439. snake	12	215.5	493. tongue	16	186.5
440. snow	29	133.5*	494. tooth	150	15 *
441. snowball	11	225.5	495. toothbrush	40	112.5
442. snow man	4	389	496. toothpaste	4	389
443. soap	81	72.5*	497. top	165	3.5*
444. socks	20	167.5	498. towel	44	108
445. soup	56	98 *	499. town	6	302.5*
446. spool	5	325.5	500. toy	1	517.5*
447. spoon	134	31 *	501. train	15	193 *
448. spread	1	517.5	502. tray	4	389
449. squirrel	13	209.5*	503. tree	89	66 *
450. stamp	21	162 *	504. trousers	39	115
451. star	84	70 *	505. trunk	5	325.5
452. stew	1	517.5	506. tub	4	389
453. steps	1	517.5*	507. tumbler	1	517.5
454. stick	8	264 *	508. turkey	43	110 *
455. stocking	37	119.5*	509. turtle	7	285 *
456. stone	19	172.5*	510. umbrella	18	179 *
457. stool	12	215.5*	511. valentine	28	135 *
458. store	19	172.5*	512. vase	6	302.5
459. stove	6	302.5*	513. vest	1	517.5
460. strawberry	7	285	514. victrola	1	517.5
461. street	1	517.5*	515. wagon	8	264 *
462. string	8	264 *	516. waist	5	325.5
463. sugar	10	235 *	517. wall	5	325.5*
464. sugar bowl	1	517.5	518. wash cloth	6	302.5
465. suit	7	285 *	519. wash rag	1	517.5
466. suit case	1	517.5	520. wastebasket	1	517.5
467. sun	144	20 *	521. watch	30	132 *
468. supper	12	215.5*	522. water	137	29.5*
469. swan	1	517.5	523. watermelon	4	389
470. sweater	33	126 *	524. week	25	143 *
471. syrup	5	325.5	525. whip	11	225.5*
472. table	106	59.5*	526. whiskers	4	389
473. tablecloth	4	389	527. wind	11	225.5*
474. tablet	5	325.5	528. window	80	74 *
475. tail	11	225.5*	529. window box	1	517.5
476. tea	9	245.5*	530. window sill	37	119.5
477. tea kettle	1	517.5	531. wing	7	285 *
478. teddy bear	4	389	532. woman	143	21 *
479. teeth	22	157 *	533. women	3	447.5*
480. telephone	7	285 *	534. woods	4	389 *

ALPHABETICAL LIST OF NOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	*Rank*		*Comp. Score*	*Rank*
535. worm	4	389	547. January	7	285
536. wreath	1	517.5	548. February	7	285
537. yard	5	325.5*	549. March	14	203 *
538. year	1	517.5*	550. April	20	167.5
539. zoo	8	264	551. May	24	148.5*
540. Sunday	116	46 *	552. June	12	215.5
541. Monday	116	46 *	553. July	8	264
542. Tuesday	115	49	554. August	4	389
543. Wednesday	113	53	555. September	4	389
544. Thursday	115	49	556. October	4	389
545. Friday	114	51	557. November	4	389
546. Saturday	113	53	558. December	4	389

TABLE VII

ALPHABETICAL LIST OF VERBS SHOWING COMPOSITE SCORE AND RANK

Words marked with an asterisk (*) are found in Gates' list of 1,500 words

Words Marked with a double asterisk (**) are also in the list but used in another tense

	Comp. Score	*Rank*		*Comp. Score*	*Rank*
1. am	31	43.5*	33. danced	65	16 *
2. are	21	58 *	34. did	3	159.5*
3. ate	69	13.5*	35. do	9	92 *
4. awoke	4	140 *	36. drank	31	43.5**
5. babbled	6	111	37. draw	1	172.5*
6. barked	4	140 *	38. dressed	4	140 *
7. be	7	105.5*	39. dropped	14	74 *
8. beat	8	99.5*	40. drove	11	83.5**
9. bit	4	140 *	41. dug	4	140 **
10. bled	4	140	42. dust	2	163.5*
11. blew	14	74 *	43. empty	1	172.5
12. bought	42	34 *	44. face	1	172.5
13. bounced	46	30.5	45. fan	1	172.5*
14. bowed	131	2 *	46. fed	8	99.5*
15. broke	21	58 *	47. fell	133	1 *
16. brought	6	111 *	48. flew	30	45.5*
17. brushed	17	66.5	49. fold	7	105.5*
18. buttoned	5	119	50. followed	12	80.5*
19. called	6	111 *	51. forgot	10	87 **
20. came	107	5 *	52. fought	3	159.5**
21. carried	25	53.5*	53. found	49	27 *
22. caught	47	28.5*	54. gave	79	10.5*
23. chased	10	87	55. go	34	42 *
24. clapped	3	159.5*	56. got	60	17 *
25. climbed	8	99.5*	57. has	56	21 *
26. combed	20	61 *	58. have	71	12 *
27. cooked	4	140 *	59. heard	4	140 *
28. coughed	81	9 *	60. held	28	48 *
29. count	4	140 *	61. hid	9	92 *
30. crawled	6	111	62. hit	22	56 *
31. cried	79	10.5*	63. hopped	95	7 *
32. cut	42	34 *	64. hugged	13	77

ALPHABETICAL LIST OF VERBS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank		Comp. Score	Rank
65. hung	4	140 **	118. see	4	140 *
66. hurry	2	163.5*	119. sewed	18	64.5*
67. hurt	4	140 *	120. shame	1	172.5
68. is	23	55 *	121. sharpened	4	140
69. jigged	2	163.5	122. shone	16	69 **
70. jumped	69	13.5*	123. shook	16	69 **
71. kicked	16	69 *	124. shot	4	140 **
72. killed	4	140 *	125. shovelled	4	140
73. kissed	45	32 *	126. showed	17	66.5*
74. kneel	9	92	127. shut	38	38 *
75. knew	6	111 *	128. skated	12	80.5*
76. know	20	61 *	129. skipped	58	18
77. laughed	110	4 *	130. slapped	4	140
78. lay	4	140 *	131. slept	19	63 **
79. led	4	140 *	132. slid	5	119 **
80. lifted	1	172.5*	133. smelled	4	140 *
81. light (lit)	1	172.5*	134. smiled	1	172.5*
82. liked	27	51 *	135. snatched	4	140
83. line up	5	119	136. snowed	4	140 *
84. lock	1	172.5*	137. spilled	4	140 *
85. looked	10	87 *	138. spun	57	19.5**
86. lost	15	71.5*	139. stole	4	140
87. loved	47	28.5*	140. stood	18	64.5**
88. made	53	23.5*	141. stood up	53	23.5
89. marched	35	41 *	142. stop	1	172.5*
90. mended	4	140	143. stretch	1	172.5
91. opened	39	36.5*	144. struck	4	140 **
92. pardon me	25	53.5	145. swam	8	99.5**
93. passed	5	119 *	146. swept	13	77
94. peeled	4	140	147. swung	4	140 **
95. petted	4	140	148. talked	12	80.5*
96. picked	27	51 *	149. thanked	14	74 *
97. pinched	8	99.5	150. thank you	54	22
98. played	51	25	151. think	9	92 *
99. poured	4	140	152. thought	11	83.5*
100. pulled	6	111 *	153. threw	87	8 **
101. punished	4	140	154. tickle	1	172.5
102. pushed	30	45.5*	155. tied	10	87 *
103. put	46	30.5*	156. tiptoed	3	159.5
104. put on	6	111	157. told	4	140 *
105. rain	13	77 *	158. took	10	87 *
106. raise	1	172.5*	159. took off	9	92
107. ran	129	3 *	160. tore	20	61 **
108. read	12	80.5*	161. touched	2	163.5*
109. rode	8	99.5**	162. turn	5	119 *
110. rolled	42	34 *	163. turn around	37	39.5
111. salute	1	172.5	164. unbuttoned	5	119
112. sat	28	48 *	165. untied	5	119
113. sat down	57	19.5	166. walked	68	15 *
114. saw	102	6 *	167. wanted	27	51 *
115. scolded	8	99.5	168. was	21	58 *
116. scratched	4	140	169. washed	28	48 *
117. screamed	4	140	170. waved	37	39.5*

ALPHABETICAL LIST OF VERBS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank		Comp. Score	Rank
171. went	50	26 *	176. wiped	8	99.5
172. were	8	99.5*	177. wore	8	99.5*
173. will	6	111 *	178. wrote	39	36.5*
174. wink	4	140	179. yawned	6	111
175. whipped	15	71.5			

TABLE VIII

ALPHABETICAL LIST OF ADJECTIVES, ADVERBS, PREPOSITIONS, CONJUNCTIONS AND PRONOUNS SHOWING COMPOSITE SCORE AND RANK

Words marked with an asterisk (*) are found in Gates' list of 1,500 words

	Comp. Score	Rank		Comp. Score	Rank
1. afraid	7	133.5*	41. old	26	67 *
2. another	4	180.5*	42. plaid	4	180.5
3. bad	56	34 *	43. pretty	43	40.5*
4. beautiful	1	237 *	44. rough	9	124
5. better	4	180.5*	45. round	8	128.5*
6. big	13	94 *	46. short	27	65 *
7. broken	1	237 *	47. sick	69	27.5*
8. clean	22	80 *	48. silly	4	180.5
9. clear	4	180.5*	49. sleepy	7	133.5
10. cloudy	13	94	50. slow	4	180.5*
11. cold	43	40.5*	51. small	40	43 *
12. cool	15	87 *	52. smart	3	223
13. cross	12	108 *	53. smooth	9	124 *
14. dark	8	128.5*	54. some	4	180.5*
15. dear	3	223 *	55. soft	14	90 *
16. dirty	22	80 *	56. sore	9	124
17. dull	2	229	57. sorry	18	83 *
18. fast	1	237 *	58. sour	4	180.5
19. fat	52	35 *	59. square	4	180.5*
20. flowered	4	180.5	60. striped	4	180.5
21. foggy	1	237	61. strong	2	229 *
22. funny	8	128.5*	62. sweet	10	121.5*
23. glad	2	229 *	63. tall	28	63.5*
24. good	69	27.5*	64. thin	36	49 *
25. happy	29	61 *	65. thirsty	6	137 *
26. hard	14	90 *	66. tired	3	223 *
27. heavy	2	229 *	67. ugly	4	180.5
28. hot	12	108 *	68. warm	51	36 *
29. hungry	2	229 *	69. weak	2	229
30. kind	1	237 *	70. well	67	29.5*
31. large	33	55.5*	71. windy	1	237
32. last	7	133.5*	72. black	118	9 *
33. light	4	180.5*	73. blue	127	6 *
34. little	13	94 *	74. brown	109	17 *
35. long	26	67 *	75. gray	33	55.5*
36. many	5	139.5*	76. green	116	14.5*
37. naughty	14	90 *	77. lavender	1	237
38. new	34	51.5*	78. orange	59	33
39. next	4	180.5*	79. pink	87	21 *
40. nice	4	180.5*	80. purple	104	18 *

ALPHABETICAL LIST OF ADJECTIVES, ADVERBS, PREPOSITIONS, CONJUNCTIONS AND PRONOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank
81. red	124	7.5*
82. tan	22	80
83. white	112	16 *
84. yellow	124	7.5*
85. one	138	2.5*
86. two	138	2.5*
87. three	136	5 *
88. four	138	2.5*
89. five	138	2.5*
90. six	116	14.5*
91. seven	117	11.5*
92. eight	117	11.5*
93. nine	117	11.5*
94. ten	117	11.5*
95. eleven	39	46 *
96. twelve	39	46 *
97. thirteen	39	46
98. fourteen	39	46
99. fifteen	39	46
100. sixteen	35	50
101. seventeen	33	55.5
102. eighteen	33	55.5
103. nineteen	33	55.5
104. twenty	33	55.5*
105. twenty-one	25	73.5
106. twenty-two	25	73.5
107. twenty-three	25	73.5
108. twenty-four	25	73.5
109. twenty-five	25	73.5
110. twenty-six	25	73.5
111. twenty-seven	25	73.5
112. twenty-eight	25	73.5
113. twenty-nine	25	73.5
114. thirty	25	73.5
115. thirty-one	12	108
116. thirty-two	12	108
117. thirty-three	12	108
118. thirty-four	12	108
119. thirty-five	12	108
120. thirty-six	12	108
121. thirty-seven	12	108
122. thirty-eight	12	108
123. thirty-nine	12	108
124. forty	12	108
125. forty-one	12	108
126. forty-two	12	108
127. forty-three	12	108
128. forty-four	12	108
129. forty-five	12	108
130. forty-six	12	108
131. forty-seven	12	108
132. forty-eight	12	108
133. forty-nine	12	108
134. fifty	12	108
135. fifty-one	4	180.5
136. fifty-two	4	180.5
137. fifty-three	4	180.5
138. fifty-four	4	180.5
139. fifty-five	4	180.5
140. fifty-six	4	180.5
141. fifty-seven	4	180.5
142. fifty-eight	4	180.5
143. fifty-nine	4	180.5
144. sixty	4	180.5
145. sixty-one	4	180.5
146. sixty-two	4	180.5
147. sixty-three	4	180.5
148. sixty-four	4	180.5
149. sixty-five	4	180.5
150. sixty-six	4	180.5
151. sixty-seven	4	180.5
152. sixty-eight	4	180.5
153. sixty-nine	4	180.5
154. seventy	4	180.5
155. seventy-one	4	180.5
156. seventy-two	4	180.5
157. seventy-three	4	180.5
158. seventy-four	4	180.5
159. seventy-five	4	180.5
160. seventy-six	4	180.5
161. seventy-seven	4	180.5
162. seventy-eight	4	180.5
163. seventy-nine	4	180.5
164. eighty	4	180.5
165. eighty-one	4	180.5
166. eighty-two	4	180.5
167. eighty-three	4	180.5
168. eighty-four	4	180.5
169. eighty-five	4	180.5
170. eighty-six	4	180.5
171. eighty-seven	4	180.5
172. eighty-eight	4	180.5
173. eighty-nine	4	180.5
174. ninety	4	180.5
175. ninety-one	4	180.5
176. ninety-two	4	180.5
177. ninety-three	4	180.5
178. ninety-four	4	180.5
179. ninety-five	4	180.5
180. ninety-six	4	180.5
181. ninety-seven	4	180.5
182. ninety-eight	4	180.5
183. ninety-nine	4	180.5
184. one hundred	4	180.5

ALPHABETICAL LIST OF ADJECTIVES, ADVERBS, PREPOSITIONS, CONJUNCTIONS AND PRONOUNS SHOWING COMPOSITE SCORE AND RANK, *Continued*

	Comp. Score	Rank
1. about	4	180.5*
2. after	4	180.5*
3. and	7	133.5*
4. around	8	128.5*
5. away	4	180.5*
6. before	5	139.5*
7. behind	8	128.5*
8. down	4	180.5*
9. downstairs	4	180.5
10. for	4	180.5*
11. from	6	137 *
12. how	3	223 *
13. in	17	84.5*
14. in front of	4	180.5
15. into	14	90 *
16. no	98	19 *
17. none	1	237 *
18. not	10	121.5*
19. now	3	223 *
20. off	4	180.5*
21. on	34	51.5*
22. out of	4	180.5
23. out-of-doors	1	237
24. over	8	128.5*
25. some	6	137
26. to	30	59 *
27. to-day	76	24 *
28. to-morrow	75	25.5*
29. under	14	90 *
30. up	4	180.5*
31. upstairs	4	180.5*
32. when	4	180.5*
33. where	4	180.5*
34. with	2	229 *
35. yes	85	22 *
36. yesterday	75	25.5*

	Comp. Score	Rank
1. he	67	29.5*
2. her	29	61 *
3. him	29	61 *
4. his	19	82 *
5. I	88	20 *
6. it	50	37 *
7. its	4	180.5*
8. me	64	32 *
9. my	26	67 *
10. our	17	84.5*
11. she	47	38.5*
12. their	12	108 *
13. them	28	63.5*
14. they	47	38.5*
15. us	41	42 *
16. we	66	31 *
17. what	16	86 *
18. who	12	108 *
19. whose	4	180.5*
20. you	79	23 *
21. your	12	108 *

MARNÉ LAURITSEN GROFF,
401 Wesley Temple Building,
Minneapolis, Minn.

THE VOCATIONAL ACTIVITIES OF PUPILS OF THE PENNSYLVANIA INSTITUTION FOR THE DEAF DURING THE PAST TWELVE YEARS

Results of an Investigation made by a Special Committee

Appointed January, 1932, by the Board of Directors, of the Pennsylvania Institution for the Deaf, Mt. Airy, Philadelphia

Part I

In January, 1932, a Special Committee on Vocational Education, composed of Mr. Leonard T. Beale, Mr. Frazer Harris and Mr. Joseph Wood Wagner, was appointed by the board of directors of the Pennsylvania Institution for the Deaf. The Committee requested that first a careful canvass be made of all pupils who had been in school during the past twelve years; second, that a canvass also be made of the executive heads of schools for the deaf in the United States, and third, to invite leading authorities in Vocational Education, both local and state, to come to the school, investigate the situation, and then render a report giving their expert opinion, advice, criticism and suggestions for improvement.

The investigation has been made. Questionnaires were prepared, approved by the Committee, and sent to former pupils and officials above mentioned.

All the replies received have been collated and a tabulated summary is herewith submitted with the following comments and recommendations.

1. That the present bricklaying course be replaced with a course of instruction in automobile mechanics.

The preparing of the present situation to conform with the regulations of the Bureau of Building Inspection, and initial installation of equipment and supplies necessary to start the instruction should incur only a small expenditure.

2. That the location of our painting department be changed.

3. That the course of instruction in baking be discontinued and some other vocational subject be substituted, two years

hence, when the present instructor in baking retires. Reasons:

(a) Bread may be purchased cheaper than we can make it.

(b) Too expensive to modernize our equipment in order to conform with up-to-date bakeshops.

(c) Instruction in baking does not meet the present-day needs of our pupils.

(d) A low percentage of the pupils who learned the trade of baking while in school follow it after leaving school.

4. That the co-operative plan (part time in industry and part time in school) be tried out on a miniature scale.

I believe such a procedure not only feasible, but paramount in securing more effective vocational instruction and meeting competition in industry. For obvious reasons it is getting harder and harder for deaf girls and boys to secure an opportunity in the industrial or commercial fields.

Such a change may possibly be considered somewhat radical, when thinking of old-time school practices only, but fully warranted if put into effect with proper planning and full co-operation of all factors concerned.

5. That, if financially possible, a combination of co-ordinator, placement or employment officer and field worker be put on a full-time basis.

There is an urgent need for such an officer in order to co-ordinate the efforts of industry, the deaf and the school. Many successful schools for hearing and deaf pupils have such an arrangement in effect.

6. That a stipulated amount be set aside yearly to provide for the replacement of worn-out and antiquated equipment. Also, to make necessary changes in the vocational school in order to keep our instruction and work on a parallel basis with other schools and industry.

When we look about and see what is being accomplished in other schools along this line, only then can we fully appreciate how imperative such a method is for the welfare of an institution of this type.

7. That at least the underpaid teachers in the Vocational School be given increments of increase until they are on a similar basis with other teachers in the school.

I fully appreciate that such a recommendation may not be considered seriously at this time, but I feel that no matter how much researching we do, we cannot hope to elevate the standard or even hold our own, if we simply pay unskilled laborers' wages to professional employees. My experience, as well as that of many other educators, has been that you only receive in proportion as you pay.

8. That definite efforts be put forth to broaden the scope of vocational activities for girls. For many years much has been done in improving the vocational situation for boys, but the girls are still limited to the same activities they have been studying for the past fifty years. I want to suggest at this time that efforts be put forth to provide a training opportunity in beauty culture, as a beginning in the broadening process. I have looked into the matter of a course of study in beauty culture and believe it a feasible, as well as a desirable and lucrative, employment for girls. It costs very little to provide the necessary equipment. A number of schools are teaching this subject successfully and believe it a good occupation for girls to study and follow.

9. I wish to call your attention to the summary in Part II of this report in which the percentage of pupils who follow the various trades is given. A comparison with the summary listed in the 1920 Survey may prove interesting.[1]

Part II

Summary of Replies to Questionnaires Sent to Former Pupils

The total number of questionnaires sent to pupils who were in school during the past twelve years was 366. One hundred fifty-seven were received, seventeen were returned unclaimed, 192 were not answered.

The ages of the pupils vary from 16 to 39 years. Most of them are between 20 and 27 years of age. The average age is 25 years and the average time in school ten years.

---

[1] Steed, Lyman, "Report on Industrial Training in the Pennsylvania Institution for the Deaf and Dumb," Annals, March, 1921, (vol. lxvi, no. 2), pp. 121-136.

MEN

1. Total number of questionnaires sent out..... 216
2. Replies received 117
3. Average age of pupils replying .....24.3 yrs.
   (Oldest 39—youngest 16.)
4. Average time in school .....8 to 12 years
5. Number of graduates 49
   Number left school before graduating 68
6. Trades or useful occupation acquired at school:

Shoe rebuilding	19	Baking	10
Painting	8	Printing	27
Tailoring	23	Weaving	1
Specials	3	Bricklaying	8
Carpentry	10		

7. Trades acquired at school and followed since leaving school:

Shoe rebuilding	6	Carpentry	6
Tailoring	16	Baking	3
Painting	5	Printing	19
Bricklaying	3		

8. Present occupations followed:

Selling candy	1	Cuff-buttonhole operator	1
Laboring	6	Tailoring	9
Shoe repairing	4	Printing	19
Clerk	4	Clothing pressers	2
Upholstering	1	Grinder	1
Silk mill workers	6	Auto mechanics	1
Salesman	2	Farming	1
School janitor	1	Pretzel factory worker	1
Painting	3	Barbering	2
Photographer	1	Glazer	1
Mining	1	Draftsman	1
Poultry raising	1	Student	5
Woodworking	6	Baking	1
Core making	1	Bricklaying	3
Machine work	1	Factory worker	2
Supervising	1	Unemployed	10

9. Number of reasons given for changing occupations learned in school:

Tailoring	12	Baking	5
Printing	8	Woodworking	12
Shoe rebuilding	9	Painting	2
Bricklaying	4		

10. Number married, 18; Number single, 99.
11. Number self-supporting, 54; not self-supporting, 63.

NOTE.—Previous to the depression the above were all self-supporting. But cuts in wages and hours of work have reduced incomes to such an extent that most of the replies stated that earnings were not sufficient to live comfortably, although employed.

12. New trades suggested:

Auto mechanics	22	Book binding	1
Drawing	2	Engineering	1
Photo-engraving	5	Watch repairing	1
Showcard writing	1	Upholstering	2
Hosiery knitting	3	Machinist	1
Beauty culture	2	Farming	2
Barbering	2	Office work	1
Blacksmithing	1	Silk weaving	3
Gardening	1	Poultry raising	1
Electricity	3	Paper hanging	1
Plumbing	2	Photography	1
Blue-printing	2	Present trades sufficient	5

13. Favored more time for trade work 53
Did not favor more time for trade work 36
Did not answer 28

Total 117

14. Additional time suggested for vocational instruction: Varied anywhere from one hour a day to forty hours a week.

Per cent of pupils who follow their various trades after leaving the Institution:

MEN

Shoe rebuilding	31½	Woodworking	31½
Tailoring	69½	Baking	30
Painting	63	Printing	68
Bricklaying	37½	All trades combined	47

WOMEN

Housekeeping	50	Waitress	07½
Sewing (all kinds of factory and home sewing)	07½	Typing	00
		All trades combined	16¼

Grand total, both men and women, all trades 32 per cent.

WOMEN

1. Total number of questionnaires sent out 150
2. Replies received 40
3. Average age of pupils replying 25
4. Average time in school ..... 8 years
5. Number of graduates 22
Number left school before graduation 15
Not answering 3

Total (Oldest, 34—youngest, 17) 40

6. Trades acquired at school:

Dressmaking	36
Typing	2
Not answering	2
Total	40

7. Trades acquired at school and followed since leaving school:

Housekeeping	20
Sewing (all kinds of factory and home sewing)	7
Waitress	3

8. Present trades followed:

Housekeeping	20	Belt stitch operator	1
Waitress	3	Hospital worker	1
Worker in paper box factory	2	Clerk	1
Sewing	3	Student	1
Work in silk mill	2	Weaving	1
Worker on lamp shades	1	Worker in tobacco factory	1
Worker in shirt factory	1	Not answered	1
Proprietor of gift shop	1	Total	40

9. Reasons given for changing trades:

Could not get any sewing work	3	Poor eyesight	1
No typing work for the deaf	2	Mother's death	1
Not answered	25	Forced to find any kind of work	1
Wanted to learn another trade	1	Laid off	1
Student	1	Did not learn enough	1
		No work	1

10. Number married, 9; number single, 26; not answered, 5

11. Number self-supporting 14
Did not answer 17
Number not self-supporting 9
Total 40

12. New trades suggested:

Housekeeping	2	Making lamp shades	1
More cooking	1	Bookkeeping	1
Factory trades	1	Novelties	1
Beauty culture	5	Indexing and filing	1
Millinery and bead bag crocheting	3	No trades to suggest	17
Power-machine operating	2	Present trades sufficient	5
		Total	40

13. Favored more time for trade work, 11.
Did not favor more time for trade work, 7.
Did not answer, 12.

14. Additional time suggested for vocational instruction: Varied anywhere from one hour to three hours daily.

Part III

Summary of Replies to Questionnaires Sent to Schools for the Deaf

Questions I and II

The names of the schools from which replies were received and the number of pupils in each of these schools are not given in this report. The number of superintendents or principals reporting is noted under each heading. The smallest number of pupils reported in replies from questionnaires sent to 60 schools for the deaf, in which 45 replies were received, was 63, the largest was 614.

Question III

The largest number of pupils reported receiving vocational instruction in any one school was 366, the smallest 19.

Question IV—Hours (daily) devoted to vocational instruction?

Hours	Schools	Hours	Schools
1½	4	3	4
1 to 2	2	2 to 4	1
2	14	4¾	1
2¼	4	2 to 6	1
2½	8	2 hrs. weekdays, 3 Saturday	1
1 to 3	1	1 2-3 " 2 "	1
2 to 3	1	2 " 3½ "	1

Question V—Hours (daily) devoted to academic instruction?

Hours	Schools	Hours	Schools
2	2	4¼	2
2 to 4½	1	4½	9
3	2	4 2-3	2
3 1-3	1	4¾	5
3 to 5	1	5	15
4	4		

Question VI—How many days a week and how many weeks a year allowed to vocational instruction? Also number of years?

Days per wk.	Wks. per yr.	No.	Days per wk.	Wks. per yr.	No.
4 to 5	36	1	5 to 6	38	1
5	34	1	5 to 6	40	1
5	36	2	6		2
5	38	3	6	36	10
5	39	1	6	37	1
5	40	4	-	38	1
5½	40	1	6	39	1
5 to 6	36	2	6	40	8

Number years	Number	Number years	Number
4	2	8-10	1
4-6	2	9	1
5	2	10-12	1
5-6	1	4 years sloyd	1
6	5	Not limited	2
6-7	2	Depends on pupil	2
6-8	2	Varies	7
7	1	Until graduation	1
7-8	1	As long as possible	1
8	5	Not answered	4

Question VII—What vocational subjects are taught in your school?

Subject	Number	Subject	Number
Printing	43	Papering	1
Shoe repairing	25	Plumbing	1
Carpentry	17	Poultry raising	1
Home economics	17	Power-machine operators	1
Domestic science	15	Rug making	1
Cabinetmaking	14	Tree surgery	1
Painting	14	Wood carving	1
Baking	13	Linotype operators	6
Art	11	Mechanical drawing	6
Tailoring	11	Beauty culture	5
Barbering	10	Sewing	5
Woodworking	10	Cooking	3
Agriculture	7	Dressmaking	3
Typing	7	Bookbinding	2
Chair caning	1	Laundry work	2
Cosmetology	1	Metal work	2
Dairying	1	Photography	2
Floral culture	1	Upholstery	2
Gardening	1	Sign painting	2
Harness making	1	Auto mechanics	1
Machine shop	1	Bricklaying	1
Office practice	1	Photo-engraving	1

Question VIII (a)—Are vocational subjects taught on vocational basis?

Yes	26	Fairly well	1
No	2	Partial	2
Not answered	4	Semi-vocational basis	1
As far as possible	3	Dairying	1
Agriculture	1	Cabinetmaking	1
Not strictly	1	Printing	2
More or less	1	Sign painting	1

Question VIII (b)—Do your answers apply to both boys and girls?

Yes	36	No	1
Boys only	4	Sewing and art for girls	1
Not answered	2		

Question IX—Are the pupils permitted when first entering the vocational school to select or choose the occupation they desire to study?

Yes	15	In part yes	1
No	10	After sloyd	1
With guidance	6	As far as home environment	1
Within limits	2	To a degree	1
Some extent	1	With guidance and prevocational course	1
As a rule	1	Not answered	3
Depends on pupil	1		

Question X—If not permitted to choose, just how do they enroll in the occupation they study?

Guidance with committee	19	Demonstrated aptitudes	1
Guidance with pre-vocational	6	Parents, home environment, primary industrial indication	1
Selected by principal	2	Not answered	12
Language and home training	1		
Subject to change	1		
Not permitted	1		

Question XI—What occupation do you regard as being most helpful to the deaf?

1 General

Printing	24	Depends on locality	1
Woodworking	3	Domestic science	1
Shoe repairing	3	Housework	1
Agriculture	2	Linotype operating	1
Sewing	2	Tailoring	1
Cabinetmaking	2	Trades we are teaching	1
Carpentry	1	Tree surgery	1
		Not answered	10

2 Local

Printing	14	Linotype operating	3
Shoe repairing	4	Sewing	2
Agriculture	3	Auto mechanics	1
Cabinetmaking	3	Baking	1

Barbering	1
Carpentry	1
Cooking	1
Designing	1
Depends on locality	1
Machine shop	1
Manual training	1
Metal work	1
Ranching	1
Woodworking	1
Shoe factory	1
Tool making	1
Trades we are teaching	1
Tree surgery	1
Not answered	9

3 STATE

Printing	13
Woodwork	2
Agriculture	2
Designing	2
General farmwork	2
Beauty culture	2
Shoe repairing	2
Baking	1
Barbering	1
Cabinetmaking	1
Carpentry	1
Machine shop	1
Manual training	1
Mechanical drawing	1
Lumbering	1
Poultry raising	1
Sewing	1
Trades we are teaching	1
Tree surgery	1
Typing	1
Woodworking	1
Various trades	1
Depends on locality	1
Not answered	7

Question XII—What changes would you recommend in your own school?

Not answered	5
None	5
Better equipment	2
Additional trades	2
New trades and better teachers	2
More avenues	1
Smaller classes	1
Divide into three periods of 3¼ each	1
More hours, better equipment	1
Complete survey of each state	1
Raising teachers standard and closer supervision	1
Add auto mechanics and machinist's trade	1
Bigger building and more trades	1
More complete training	1
Pre-vocational, better teachers	1
New building and additional teachers	1
Pupils placed on outside for vocational training	1
Farming, boys; bookbinding, girls	1
Teach in full time home economics	1
Full time supervisor	1
Additional trades	1
No maintenance by pupils	1
More drawing	1
More guidance, survey, field officer	1
Placement officer	1
Agriculture and tailoring	1
Printing and typing, girls; shoe repairing, boys	1
Placement officer—facilities for post-graduate work	1
Metal work, laundry, millinery	1
Add auto mechanics, beauty culture, cleaning and pressing	1
Better instructors	1
More time and more class hours	1
More emphasis on vocational training in upper grades	1

Co-operative training in connection with the vocational phases of pupils' education 1
Payment of higher minimum salary rate in order to attract higher type teachers 1
Dropping of obsolete trades and replacing them with subjects that more nearly meet present-day needs 1
More time for vocational instruction and the stressing of related English 1

Question XIII—Do your pupils after leaving school follow the occupation acquired while at school?

Some	7	Not all	1
No records	4	Sometimes	1
No	4	In most cases	1
Yes	2	Only to some extent	1
Majority	2	Printers do	1
Usually	2	Some branches	1
Generally	2	As a rule	1
Not always	1	Some do, some don't	1
Not over 25 per cent	1	Not answered	1
Frequently	1	Fairly well	1
More or less	1	I doubt it	1
Partly	1	Often	1
Number do	1	To a certain degree	1
To a fair degree	1	Whenever possible	1
Largely	1		

Question XIV—What percentage follow each occupation taught?

No records	25	About 50	1
Not answered	7	About 15	1
Yes, as nearly as possible	1	About 2-3	1
40	1	About 50 in printing	1
60	1	Very small	1
40 to 50	1	Printing to a large extent	1
About 75	1	Home economics exclusively	1
64	1		

Question XV—Do you have any pupils enrolled on the co-operative or part-time basis of instruction?

No	21	None this year	1
Yes	17	No records	1
Not answered	2	None	1
3 pupils	1		

Question XVI—Do you believe that the co-operative plan will aid the vocational phase of a pupil's education and in your estimation is it feasible?

Yes	23	Possible	1
No	11	Not here	1
Not answered	4	Some places	1
Special cases	3	Yes and no	1

Question XVII—Do you believe more time should be devoted to vocational education?

No	18	Do not know	1
Yes	8	To some in last year	1
Not answered	5	Not more than present	1
Depends on pupil	3	Yes and no	1
More time	2	Not until 17 to 18 years	1
In some cases	2	With backward	1
Not here	1		

Question XVIII—If so. When and how?

Not answered	22	Yes	1
More time	3	From 17 to 21	1
Depends on pupil	3	2 hours academic 4 hours vocational	1
More vocational for backward pupils	3	Not practical	1
More time for vocational work	2	Correlating voc. and language	1
After graduation from academic department	2	To large pupils	1
Some	1	More vocational work	1
To some in last 2 years	1	Additional summer courses	1

Question XIX—Is your vocational instruction on a par with your academic instruction in so far as teacher qualification, organized courses of study, procedure and school atmosphere are concerned?

No	17	Not now in many respects	1
Yes	13	Very nearly	1
Not answered	3	Only printing and cooking	1
Almost	2	Teachers and atmosphere, yes; course of study, no	1
Almost but not quite	1	Not quite	1
In some instances	1	No and yes	1
Only in some respects	1		
Not quite so complete	1		

Question XX—Do you find it difficult to place your pupils in industry?

Yes	17	During depression	1
No	7	To some extent	1
We do not try	4	Not very	1
Not answered	4	Do not make it a practice	1
No difficulty in normal times	3	Some do, some do not	1
At present yes	2	Some	1
Less than other	1	No records	1

Question XXI—If so, why?

Not answered	17	Attitude of employers	1
Yes	5	Lack of industries	1
Deafness	5	Conditions, changes	1
No placement bureau	3	Supply and demand	1
Lack of public understanding	2	No chance for woodwork	1
Compensation laws	2	Due to location	1
Scarcity of work	2		

Question XXII—If financially possible, would you recommend employing a placement officer?

Yes	32	Not at present	1
Not answered	6	Yes for large school	1
No	4	Not necessary	1

NOTE.—Those desiring detailed information in regard to any of the answers are requested to correspond with the school.

HARRY B. BROWN,
Principal of the Vocational School,
Pennsylvania Institution, Mt. Airy, Pa.

SURVEY OF THE ADULT DEAF OF MARYLAND

INTRODUCTION

A survey covering the adult deaf of Maryland was made as the result of a meeting held in the office of Governor Albert C. Ritchie on March 25, 1931, at which time a small delegation presented to the Governor the request that a home for indigent deaf persons be provided and maintained at state expense. Shortly thereafter a member of the group, Mr. Robert Benjamin, of the House of Delegates, presented a bill before the Legislature which resulted in the passing of the following act:

Joint Resolution No. 19 of the Legislature of 1931 states that: "The Governor of Maryland be and he is hereby authorized and requested to appoint a commission, of not more than five (5) persons, to make an investigation of the labor situation as it affects the deaf people of the State of Maryland and the conditions of the aged and infirm deaf of the State, with a view to establishing a home for them."

Governor Ritchie appointed the following commission to make the proposed survey: Mr. Ignatius Bjorlee, superintendent of the Maryland State School for the Deaf; Mr. John H. Baker, banker and prominent business man of Baltimore and Frederick who is also vice president of the Board of Visitors of the Maryland School; Attorneys Vincent Demarco and Charles E. Moylan of Baltimore; and Mr. Orlando K. Price, employed at the United States Bureau of Printing and Engraving, Washington, a resident of Bal-

timore and a graduate of the Maryland State School for the Deaf.

This commission held two meetings for the purpose of determining the best ways and means of securing a comprehensive survey without involving any cost to the state. No appropriation having been made to finance an expensive census taking, it was decided that a subcommittee composed chiefly of representative deaf men and women be invited to assist with this work. The response of the committee as chosen was prompt and at a dinner meeting tendered by Mr. John H. Baker at the Belvedere Hotel, Baltimore, on February 19, 1932, a plan of action was inaugurated and a proposed questionnaire carefully considered and adopted. The subcommittee entrusted with this responsible task consisted of: Mrs. August Wriede, Mrs. A. E. Feast, Mrs. Fred Coblenzer, Rev. D. E. Moylan, Mr. Leo J. Noppenberger, Mr. Adolph Bomhoff, Mr. Michael Weinstein, Mr. Henry J. Stegemerten, Mr. Rozelle McCall, Mr. Ray Kauffman, Mr. George Faupel, Mr. L. B. Brushwood, Mr. John A. Trundle and Mr. J. L. Metty.

The only member of this committee not deaf was Mrs. Fred Coblenzer, one of the original proposers of the movement and a member of the delegation which interviewed the Governor.

The committee was instructed to make a careful personal solicitation to secure the desired information. Where a personal interview did not seem necessary, or where distances prevented, questionnaires were sent by letter.

Mr. Moylan inaugurated a unique plan whereby at each succeeding meeting of the committee, all names of deaf persons who had been located were read in alphabetic order and additional names proposed as they came to the minds of the committee. Each of the various church denominations and organizations of the deaf were represented and all of their rosters of membership were included. The principal of the school for the colored deaf at Overlea was entrusted with the gathering of information covering the colored deaf population. As new names were added, these individuals were in turn asked to suggest additional names of deaf

people who might not already have been included in the list.

The details of the survey have been explained here in full because it is felt that a knowledge of this method of procedure may be of value to any community that may desire to make a like survey. The Commission desires also to express its heartiest appreciation of the splendid type of work which was done by the subcommittee under the direction of Mr. Price, also to Miss Hazel McCanner and Miss Margaret S. Kent of the staff of the Maryland School, who have devoted much time toward the compilation of the data.

While reading the results of the findings of the survey, one should bear in mind that these figures were gathered during what may well be regarded as the most critical period, from the standpoint of unemployment, in the history of the country. Interestingly enough, this fact probably has little bearing on the original purpose, namely, to determine the number of indigent deaf persons for whom a home should be provided.

In common with the general population, a large number of the deaf were, during this period, rated among the unemployed, but having in previous years been permanently employed, they fell back upon such resources as were available to assist in tiding them over the critical period.

Questionnaire

A copy of the questionnaire as submitted, with the elimination of one or two questions that appeared to be of little or no value as the survey progressed, follows:

QUESTIONNAIRE

1. Name .....
2. Address .....
3. Age .....Place of birth .....
4. Married .....
5. Full name of husband, or wife's name before marriage .....

.....

6. Number of children and age of each

   Boys..... Girls.....

   ....

   ....

   ....

   ....

   ....

7. Are any of the children deaf?.....
8. If so, how many?.....Boys.....Girls.....
9. How many years have you been a resident of Maryland?.....
10. Are you white or colored?.....
11. Where did you receive your education?.....
12. What is your occupation?.....
13. Are pou permanently employed?.....
14. With what firm?.....
15. If not employed, how are you being supported?.....
16. When were you last permanently employed?.....
17. Where were you last employed?.....
18. How did you secure your position?.....
19. Do you have any handicap other than deafness?.....
20. What trade did you learn at school?.....
21. To what church denomination do you belong?.....
22. In case of illness or serious accident, are you financially able to maintain yourself?.....
23. Do you have relatives financially able to care for you in case you become disabled?.....
24. Do you have relatives who are willing and disposed to care for you in case you become disabled?.....
25. Have you met with serious difficulty in securing or maintaining steady employment?.....
26. Explain cause of such difficulty, if any.....

    .....

    Remarks .....

    .....

    .....

Date..... Data secured by

.....

The information on nativity gave the following data:

PLACE OF BIRTH

Native	*Number*	*Per Cent*	*Foreign Born*	*Number*	*Per Cent*
Maryland	375	71.4	Russia	9	
Virginia	31		Germany	8	
West Virginia	19		Italy	6	
Pennsylvania	16		Austria	2	5.7
Washington, D.C.	12		Canada	2	
New York	10		Ireland	1	
North Carolina	8		Poland	1	
South Carolina	3		Scotland	1	
Delaware, Kansas, Massachusetts and Mississippi, two each	8	22.9		525	100.
Connecticut, Georgia, Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, New Jersey, Ohio, Rhode Island, Wisconsin and Porto Rico, one each	13				

Summary

Maryland	71.4
Other states	22.9
Foreign born	5.7
	100.0

The figures indicate a considerable fluctuation on the part of the deaf and is in approximately the same ratio as for the population of the entire State. According to the 1930 census the foreign born population of Maryland was 5.9 per cent.

SCHOOLS ATTENDED

	Number Students	*Per Cent*		*Number Students*	*Per Cent*
Maryland State School	330	62.9	Baltimore Public Schools	9	1.7
School for Colored Deaf	57	10.9	Washington, D.C.	7	1.3
St. Francis Xavier	30	5.7	New York	7	1.3
Knapp Institute	20	3.8	North Carolina	7	1.3
Virginia	13	2.5	West Virginia	6	1.1
Pennsylvania	12	2.3	Unreported	8	1.5
Massachusetts, Minnesota and South Dakota each 2				6	1.1
Connecticut, Georgia, Iowa, Kansas, Mississippi, New Jersey, Ohio and Wisconsin each 1				8	1.5
Canada 2; Austria, Germany and Russia each 1				5	1.0
				525	99.9

Summary

Maryland	85.0
Other states	12.4
Unreported	1.5
Foreign countries	1.0
	99.9

As worded, the question "Where did you receive your education?" might be construed differently. Probably in most cases the reply was made to cover the school last attended. On the other hand it may apply to the school in which the greatest number of years were spent. Accordingly, it is, for instance, quite likely that a more careful study would reveal the fact that in the case of the Knapp School, a private school in Baltimore which was discontinued in 1913, some of the pupils completed their education at the Maryland State School for the Deaf, although a larger number followed their teacher to the public schools of Baltimore City.

RELIGIOUS AFFILIATION

	Number	*Per Cent*		*Number*	*Per Cent*
Methodist	140	26.7	Presbyterian	3	.6
Catholic	121	23.0	Reformed	3	.6
Episcopal	88	16.8	None	3	.6
Baptist	39	7.4	Christian	2	.4
Hebrew	33	6.3	Brethren	2	.4
Lutheran	22	4.2	Russian Orthodox.	1	.2
United Brethren	7	1.3	Moravian	1	.2
"Protestant"	5	1.0	Unreported	55	10.5
				525	100.2

MARITAL STATUS

	Number	*Per Cent*
Married men	135	25.7
Married women	142	27.0
Divorced men	2	.4
Divorced women	1	.2
Widowers	8	1.5
Widows	11	2.1
Single men	153	29.1
Single women	73	13.9
	525	99.9

Families in which both living parents are deaf, 104.

The data on frequency of deafness among children one or both of whose parents are deaf, involving a total of 362 children, yielded a number of interesting facts.

BOTH PARENTS DEAF

		Number	*Per Cent*
Boys hearing	101		
Girls hearing	94	195	53.9
Boys deaf	3		
Girls deaf	8	11	3.0

ONE PARENT DEAF

		Number	*Per Cent*
Boys hearing	73		
Girls hearing	69	142	39.2
Boys deaf	5		
Girls deaf	9	14	3.9
		362	100.0

The information concerning the number of families in all of which there are children and in which one or both parents are deaf is summarized as follows:

	Number	*Per Cent*	*Families*	*Per Cent*
Families with hearing children only (both parents deaf)	75	53.9		
Families with hearing children only (one parent deaf)	52	37.4	127	91.4
Families containing deaf children (both parents deaf)	7	5.0		
Families containing deaf children (one parent deaf)	5	3.6	12	8.6
Total number of families			139	100.0

In comparison with the data just presented, is the following related information concerning the pupil enrollment, for the biennial period, 1930-32, at the Maryland State School for the Deaf:

		Number	*Per Cent*
Number of pupils	218		
Pupils with both parents deaf		6	2.8
Pupils with one parent deaf		2	.9
Total of deaf pupils one or both of whose parents are deaf		8	3.7

The information collected during the survey on matters pertaining to the vocational training of the deaf is presented in the following tabular summary.

VOCATIONAL TRAINING PURSUED AT SCHOOL

Men	*Number*	*Per Cent*
Cabinetmaking	84	28.2
Shoemaking	75	25.2
Printing	71	23.8
No trade taught in school attended	27	9.0
Tailoring	7	2.3
Farming	4	1.3
Art	4	1.3
Baking	2	.7

Electrical engineering	1	.3
Barbering	1	.3
Bookkeeping	1	.3
Unreported	21	7.0
	298	99.7
Women		
Cooking and sewing	144	63.4
No trade taught in school attended	23	10.1
Business course	2	.9
Bookbinding	1	.4
Unreported	57	25.1
	227	99.9

In many instances pupils at school studied various trades. Accordingly, it is quite probable that in selecting a single trade such as barbering, the individual has made the choice to cover the line of work which he subsequently followed.

The preponderance of shoe repairing over other vocations is due to the inclusion of the pupils of the school for the colored deaf, a large proportion of whom have been instructed in this type of work; also to the fact that a number of those surveyed attended school prior to the installation of other trades.

Doubtless some of the girls did not consider instruction in cooking and sewing as vocational training, for irrespective of the school attended, the number would appear to be relatively too large.

EMPLOYMENT

	Number	*Per cent*
Men and women permanently employed including students	331	63.0
Men and women not permanently employed	144	27.4
No definite information	50	9.5
	525	99.9

Men	*Number*	*Per cent*
Permanently employed including 23 students	161	54.0
Not permanently employed	110	36.9
No definite information	27	9.0
	298	99.9
Women		
Permanently employed including housewives and 11 students	170	75.0
Not permanently employed	34	14.9
No definite information	23	10.1
	227	100.0

OCCUPATIONS OF MEN

	Number	*Per cent*
Laborers	46	15.4
Printers	34	11.4
Farmers	23	7.7
Students	23	7.7
Cabinetmakers and carpenters	22	7.4
Shoemakers	19	6.4
Mechanics	11	3.7
Factory workers	9	3.0
Painters and decorators	6	2.0
Teachers	5	1.7
Clerks	5	1.7
Bakers	5	1.7
Tailors	5	1.7
Toymakers	4	1.3
Artists	4	1.3
Cigar makers	4	1.3
Barbers, bookbinders, clergymen, packers, paper hangers, hospital orderlies, artistic lithographers, engravers, gardeners, laundrymen, transfer and truck drivers, plumbers, broom makers and pattern makers, 2 each	28	9.4
Principal and teacher, librarian, cook, boat repairer, paper cutter, supervisor, electrician, dental mechanic, greaser in service station, bacteriologist, upholsterer, photo engraver, salesman, shopman in railroad, jeweler, pool maker, lumber inspector, one each	17	5.7
Unreported	28	9.4
	298	100.0

OCCUPATIONS OF WOMEN

	Number	*Per cent*
Home makers	120	52.8
Houseworkers	27	11.8
Factory machine operators	19	8.3
Seamstresses	11	4.8
Students	11	4.8
Laundresses	8	3.5
Teachers	4	1.7
Clerks	2	3.5
Candy makers	2	
Saleslady	1	
Supervisor	1	
Milliner	1	
Typist	1	
Unreported	19	8.3
	227	99.5

A careful study of the above table will clearly indicate the difficulty confronting schools for the deaf in supplying suitable vocational training. With 53 per cent of the women following the pursuit of home making and with 12 per cent

employed in one form or another of housework, it is evident that our domestic science departments should not limit themselves to teaching the rudiments of cooking and sewing, but should branch out into invalid cookery, the care of infants, etc.

Of the more prevalently taught vocational courses, printing, to the extent of 11.4 per cent among the men, holds first place. Although cabinetmaking and carpentry appear to assume a minor rôle with but 7.4 per cent, it is a well recognized fact that the training to handle tools in the cabinet shop has paved the way for securing permanent employment in many of the other vocations mentioned. Painting, for instance, is of necessity taught in connection with the cabinetmaking course. Hence, when the other vocations mentioned are considered, it is reasonable to assume that the percentage of men who are employed in gainful pursuits as a result of the training taught in the cabinetmaking department would approximate 15 per cent and might run as high as 20 per cent. In addition to this, it should be remembered that a knowledge of cabinetmaking and woodworking is of tremendous value to a farmer or to one who owns his own home. It may also be the means of aiding, during spare hours, men employed in various other vocations.

As previously stated, the present employment situation must be taken into full consideration when studying the above tables.

The commission recommends the making of a supplementary survey on employment when times shall again be normal.

DEAF POPULATION OVER 60 YEARS OF AGE

	Number	*Per cent*
Men over 60 years of age	45	5.9
Women over 60 years of age	32	8.5
Population over 60	77	14.4
Single men over 60 years	11	2.1
Single women over 60 years	7	1.1
Widows over 60 years	11	2.1
Widowers over 60 years	8	1.5
Couples one over 60 years	14	2.6
Couples both over 60 years (13)	26	5.0
	77	14.4

The above statistics have a direct bearing upon the question of dependency, for according to census figures issued by the United States Treasury Department, Thrift Bureau, 54 per cent are dependent upon relatives or charity for support after they have attained the age of 65.

Those considered eligible to entry in a home for aged or infirm deaf number 32.

DEAF DEPENDENT UPON CHARITY

White men	17
White women	13
Colored men	1
Colored women	1
	32

AGES OF ELIGIBLES

80 years or over	1
70 to 80 years	7
60 to 70 years	9
50 to 60 years	5
40 to 50 years	6
30 to 40 years	3
Below 30 years	1
	32

Of the 15 below the age of 60, all have other physical handicaps in addition to deafness, such as extremely impaired vision, Saint Vitus' dance, chronic illness, etc.

Of the total deaf population of the state of Maryland, 77 are over 60 years of age, representing 45 men and 32 women.

COMMISSION'S REPORT TO GOVERNOR RITCHIE

Hon. Albert C. Ritchie,
Governor of Maryland,
Annapolis, Maryland.

DEAR SIR:

In accordance with Joint Resolution No. 19 of the Legislature of 1931, you appointed a commission to make an exhaustive study concerning the adult deaf of Maryland. To conform with Joint Resolution No. 19 of the Legislature, this commission has held several meetings at which all members were present. It has also engaged the services of a special committee of 14 composed largely of deaf citizens who have made a personal canvass of the State, and the

commission believes that the questionnaires covering the desired statistical information have been filled out and filed by practically every deaf adult of the State. For your information a copy of the blank as used is attached hereto.

Briefly summarizing the results, it can be stated that at the time the canvass closed, June 1, 1932, there were:

Men

Employed	138
Unemployed	110
Definite information not given	27
Students	23

Women

Employed, including married women or home makers	159
Unemployed	34
Definite information not given	23
Students	11
	525

While it is unfortunate that this survey should be made during a period of financial stress when unemployment is prevalent, a condition which would naturally affect a handicapped group more seriously than other citizens, the commission feels that in a general way the economic standing of the deaf throughout the state is quite satisfactory.

A careful study of the report reveals the fact that 32 of the deaf are at the present moment in need of home facilities. In every instance, the members of this group have passed the age where they are no longer expected to maintain themselves, have other physical handicaps in addition to their deafness, or are suffering with chronic illness. The commission further feels that this number would not be materially altered even though the times were normal. Because of the peculiar nature of their affliction, being for the most part unable to communicate by normal speech, these individuals would be practically isolated and cut off from the normal means of communication were they to be placed in the various county homes throughout the state.

Accordingly, it is felt that a home should be provided for this group. The regulations governing such a home would determine that while a few of the inmates might be practically self supporting, the large majority would be wards

of the state, and it is respectfully urged that careful consideration be given by your Excellency to the advisability of recommending the procuring of such a home for a group of citizens who because of the above described handicaps, would otherwise be deprived of such comforts as may come to hearing people through the channels of conversation among themselves, the use of the radio and particularly being deprived of such spiritual advice as can conveniently be provided by the various church denominations through ministers of their own faith where the deaf could be congregated in one place so that an interpreter could conveniently be had.

The objection that by the erection of such a home class legislation is being established, would probably be offset by the fact that the deaf represent the only group for whom the above mentioned limitations would apply.

Further detailed information will gladly be given upon request.

The sudden and untimely death of Mr. Vincent Demarco removes from this commission one of its most valued members, but from our personal knowledge of the views held by Mr. Demarco, we feel certain that had he lived, his signature would have been affixed to the above report.

Respectfully submitted,

IGNATIUS BJORLEE,
Chairman, Survey Commission,
Frederick, Maryland.

REPORT OF THE 1931 SURVEY OF THE ILLINOIS SCHOOL FOR THE DEAF

Purpose

The purpose of the survey was to secure as accurate a measure as possible of the intellectual ability and educational achievement of the children. Except for the observations made during the tests, no attempt was made to study their behavior or personality difficulties or to analyze their school record or their past experience. This should be kept in mind in interpreting the results of the tests as it is impossible to understand many of the discrepancies between the child's school achievement and his level of intelligence or between his grade placement in school and his grade placement on the educational tests without this information.

Tests Used

A. *Intelligence Tests*

The test which has been most frequently used in the surveys of schools for the deaf is that which was devised several years ago by Dr. Rudolf Pintner. As far as we know, it is the only group intelligence test available for this purpose. It has been used by most workers in surveys of schools for the deaf and there is available in the literature considerable material on this test which we can use for comparison with our results on deaf children. Although the test has been generally used, it does not give so reliable an index of mental ability as do most of the group intelligence tests for hearing children. It is adequate only for brief survey purposes and gives only a general classification of the children.

The Institute for Juvenile Research (Illinois) Intelligence Test has been devised by the Institute workers particularly for deaf children. The authors of the test have been working on its construction and standardization for the past two years. It has been tried out on a limited number of deaf children but no norms are yet available for comparative purposes. On 116 cases of hearing children the test yielded a reliability coefficient of .92. It correlates .82 with the Pintner Non-Language test and .65 with the Point Per-

formance Scale. These correlations are sufficiently high to warrant our using it as an intelligence test.

As there were no norms on this test, we were unable to give a mental age or an IQ. rating. We were able, however, to make comparisons with 200 children in the Armstrong School to whom the test had been given. This enabled us to make rough classifications, such as very superior, superior, average, dull and backward, and mentally retarded.

These two group intelligence tests were given in November. They were brought to the Institute, scored and the results of the tests compiled. These will be described later. In February, 1931, five student workers went to the state school for the deaf at Jacksonville and gave individual tests to 253 children. The individual test used for this purpose was the Grace Arthur Point Performance Scale. This scale consists of a series of form boards which can be given entirely by pantomime. It includes the following tests: The Knox Cubes, Sequin Form Board, Casuist Form Board, Manikin and Feature Profile, Mare and Foal, Healy Picture Completion Test I, Porteus Maze test and Kohs Block Designs. The ratings on the separate tests are combined into one score and from this a mental age and IQ. can be secured. In this manner the combined rating is used as it gives a more reliable score.

From our observations, without having any statistical data to confirm our judgments, our impression is that the test does not work satisfactorily for the average child above fourteen or fifteen as it is too easy above this level. In the tables it will be noticed that several children made scores above norms.

B. *Educational Tests*

There are no suitable educational tests for deaf children. The ones that were used for this survey were the Stanford Achievement Reading and Arithmetic. We were informed by the managing officer of the school that these tests are required of all students who have been admitted to Gallaudet College and it seemed, therefore, that the use of them was in conformance with the practice in other schools for the deaf.

Only the two tests in arithmetic and the two tests in reading were used.

Giving of the Tests

Both the group and the individual tests were givin by the Institute workers with the assistance of the managing officer and his staff. The psychologists were given instruction by the teachers in the giving of the tests to the children. In some cases where the psychologists felt that the instructions were not being understood by the child, either the managing officer or the assistant whom he assigned gave the instructions. In giving the individual performance tests two or three cases were tried out as experiments under the supervision of the managing officer as preliminary to the giving of the tests. In most cases, however, the directions both on the group intelligence tests, the educational tests and the performance tests were readily understood by the child.

Results

The results of the tests are presented in the following tables. The purpose of using three intelligence tests was to get a more accurate rating. The original purpose was to combine the results of these three tests into one final rating. Upon further consideration, however, it was decided to present the results of each test separately. If the three tests were equally reliable then there would be some advantage in combining the results. However, as the tests are not equally reliable, combining them does not give so accurate a description of a child's ability as presenting the tests separately. In this case it seemed that the combined rating on the performance tests was more reliable than either of the other two and that the Pintner was better standardized than the I.J.R. In writing up the reports on the individual cases, we gave the Point Performance more weight than either of the other two. We took into consideration, however, not only the results on the intelligence tests but also the educational achievement and grade placement.

A. *Results from the Pintner Non-Language Test*

Table I gives the distribution of raw scores for each age group on the Pintner Non-Language test. The total distribu-

tion is given in the column on the right. The median or average score for each age group is given in the row at the bottom of the table. These median scores mean little unless compared with the results for other children. Such a comparison is given numerically in Table II and Figure I. Inspection of Figure I will make the comparison clear. Graph A gives

TABLE I

ILLINOIS SCHOOL FOR THE DEAF, PINTNER TOTAL SCORE

Range of Raw Score	Chronological Age											Total Distribution
	9	10	11	12	13	14	15	16	17	18	19	
550–575							1		3		4	8
525–549					1			2	1		9	13
500–524							2	2	4	6	5	19
475–499				1	2		3	6	3	3	4	22
450–474					1	1	4	3	3	2	6	20
425–449		1	1		5	5	6	2	3	3	6	32
400–424		1		1	4	2	5	8	7	4	9	41
375–399		1	1	3	3	2	4	3	4	5	6	32
350–374				1	2	5	3	5	6	3	5	30
325–349		1	5	3	4	4	3	3	2	1	2	28
300–324		2	2	2	4	3	1	4	2		2	22
275–299	2	1	2	1	2	2	3	4			2	19
250–274	1	1	1	1	6	1	1	1				13
225–249		3	2	1	1	4	2	1	1		1	16
200–224			2	1	1	2	1	2	2	1	2	14
175–199		1	3	3	6	3				1	2	19
150–174			4	2	6	3						15
125–149		1	3	2	2	4			2			14
100–124		4		1	4	3		1		1		14
75– 99				1	1							2
50– 74		1										1
25– 49		1			2							3
0– 24					2							2
Total No.	3	19	26	24	59	44	39	47	43	30	65	399
Median		237	237	275	268	300	408	396	409	419	431	

the results of the 1927 Survey of the Illinois School for the Deaf; Graph B the results of the 1931 Survey of the Illinois School for the Deaf; Graph C gives the averages for deaf children from a large number of schools for the deaf and Graph D gives the results for hearing children secured by Pintner.

The median scores for the deaf children in the 1931 Survey are above those of the 1927 Survey at every age except

eighteen and nineteen. They are slightly below the norms for other deaf children below year fourteen. Above fourteen they exceed the norms of other deaf children. They are below the average for hearing children at every age. It seems that the children in the Illinois School for the Deaf are

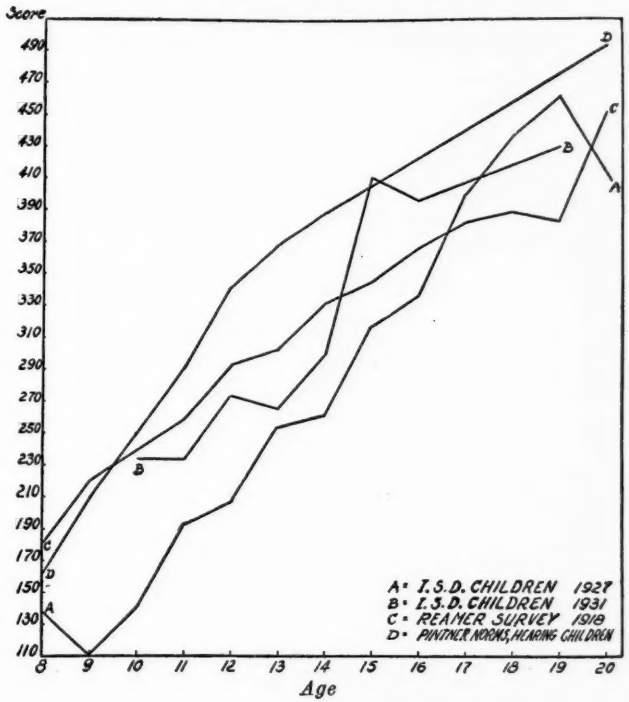


FIGURE I

Median Raw Score of the Children at the Illinois School and of Other Deaf Children and Hearing Children on the Pintner Non-Language Test

about the same in General Intelligence as those in other schools for the deaf. We are forced to the conclusion, however, both from these results and from the results of other studies, that deaf children are on the average below the hearing child in general intelligence.

TABLE II

SHOWING MEDIAN RAW SCORES OF CHILDREN OF ILLINOIS SCHOOL AND MEDIAN SCORES OF OTHER DEAF CHILDREN AND HEARING CHILDREN ON PINTNER NON-LANGUAGE TEST

	Chronological Age												
	8	9	10	11	12	13	14	15	16	17	18	19	20
I. S. D. Children 1927	137	112.5	143.7	192.5	208.9	256.2	262.2	318.7	341.6	400	437.5	462.5	412.5
I. S. D. Children 1931			237.	237.	275.	268.	300.	408.	396.	409.	419.	431.	
Reamer's 2,172 Deaf Cases	180	219	242	262	292	302	325	338	369	383	389	387	446
Hearing Children Pintner's Norms	162.5	210	247	292	343.5	369.5	389.						494

The difference in average score from one age level to another seems much less uniform in the 1931 Survey than in any of the other groups. The thirteen-year-olds actually made a lower raw score than did the twelve-year-olds, while the fifteen-year-olds made a very much higher score than did the fourteen-year-olds and even a higher score than the sixteen-year-olds. There should of course be a fairly constant increase from one age level to another.

TABLE III

ILLINOIS SCHOOL FOR THE DEAF, DISTRIBUTION OF MENTAL AGES FOR CHRONOLOGICAL AGES 9 TO 14

Mental Age	Chronological Age					
	9	10	11	12	13	14
Above norm		1	2	2	14	10
16–17						
15–16						
14–15						
13–14				3	4	2
12–13			1	1		4
11–12		5	7	6	10	5
10–11	3	2	1	2	9	1
9–10		3	4	1	1	5
8– 9		1	3	4	9	4
7– 8		5	7	4	8	7
6– 7		1		1	2	1
Below 6		1			3	
Total No. Cases	3	19	25	24	60	39
Median Mental Age	10–5	9–6	9–8	11–0	10–9	11–4

It is difficult to give a reason for this lack of uniform increase without further analysis of the cases. It may be due to chance selection of bright children at one age group and dull ones at another. It may be due to the small number of cases or it may be due to a difference in the technique in the administration of the tests at the different year levels.

Table III presents the mental ages of the children for age groups up to fifteen. Mental age norms above this are not available on the Pintner test. The last row at the bottom of the table gives the medians for each age. The median rather than the average was computed because of the effect of the possible irrelevant low and high scores on the average.

It will be noticed by inspection of the last row that the three nine-year-olds were bright, but that the mental age of the other age groups was decidedly below their chronological age. This, of course, means that on the average the deaf children are below the hearing children as measured by this test.

Table IV presents the distribution of IQ.'s derived from the Pintner Non-Language test for ages nine to fifteen. The

TABLE IV

ILLINOIS SCHOOL FOR THE DEAF DISTRIBUTION OF IQ.'S FOR AGES 9 TO 14 ON THE PINTNER NON-LANGUAGE INTELLIGENCE TESTS

Range of IQ.	Chronological Age					
	9	10	11	12	13	14
Above Norm		1	2	1	14	10
115–120						
110–114	1	2	1	1		
105–109	2	3		2		
100–104		2	3	1	3	
95– 99			4	2	1	
90– 94		3	1	4	2	1
85– 89			1		4	4
80– 84		1	3	2	5	4
75– 79			2		7	2
70– 74		1	2	3	1	1
65– 69		4	4	2	2	4
60– 64		1	2	2	8	2
55– 59				3	5	5
50– 54					4	5
45– 49					1	1
40– 44						
Below Norm		1			3	
Total No. of Cases	3	19	25	23	60	39
Median IQ.	108	93	84	84	79	79

IQ.'s above this level could not be determined because of the inadequacy of the norms. The last row of the table gives the IQ. ratings. If these ratings are compared with those given in Table XII, it will be noticed that the results of the two tests are quite different. The median IQ. on the Pintner Non-Language test is about 84 while that on the performance test is 91. It may be that the low medians on

the group non-language test is due to the inability of the pupil to comprehend the directions as given by the examiners or that the pupils have not learned to follow instruction given to fairly large groups.

Table V gives the distribution of each chronological age group on the I.J.R. Non-Verbal Intelligence test. This test

TABLE V

DISTRIBUTION OF WEIGHTED RAW SCORES ON I.J.R. NON-VERBAL TEST, ILLINOIS SCHOOL FOR THE DEAF, 1931

Range of Score	Chronological Age											Total Distribution
	9	10	11	12	13	14	15	16	17	18	19	
300–314									1		1	2
285–299									1	1	3	5
270–284					1		1		1	2	4	9
255–269							1		3		7	11
240–254							3	5	6	3	8	25
225–239				1	2	3	2	6	4	6	7	31
210–224						1	6	5	5	5	9	31
195–209		1		1	9	3	9	4	6	1	6	40
180–194			2	2	9	6	6	5	8	3	4	45
165–179			3	3	5	6	3	5	4	2	5	36
150–164		3	4	1	8	3	5	3	4	1	1	33
135–149			3	6	2	4	5	3	3	1	7	34
120–134		4	4	4	7	4	2		1		1	27
105–119	1	4	4	2	7	3	1		1		2	25
90–104		2	3	2	8	2	2			2	1	22
75– 89	1	3		1	1	3	1		1	1	1	13
60– 74		1			2	3		1	1			8
45– 59		1	1	1	2	1		1				7
30– 44						1						1
15– 29					1							1
0– 14												
Number	2	19	24	24	64	43	47	38	50	28	67	406
Median	97	114	135	140	154	151	190	200	200	219	219	
Smoothing	103	115	130	143	148	165	180	197	206	213	219	

was devised by Institute workers especially for this survey. It has been given to a fairly large number of normal hearing children but no adequate norms have been established. Consequently, it is impossible to compare this group on this test with other hearing or deaf children.

In order to use the results of the test, the children were compared with those of their own chronological age and

with the average of those in other chronological ages in this group. The last two rows at the bottom of the table give the medians for each chronological age. The second to the last row gives the simple median while the last row gives the medians after they have been smoothed. For practical purposes it was assumed, for example, that if a child ten years of age made a score equivalent to or above the median

TABLE VI

DISTRIBUTION OF GRADE ACHIEVEMENT IN ARITHMETIC, COMPUTATION FOR EACH GRADE

Range of Grade on Test	School Grade									
	3	4	5	6	7	8	9	10	11	12
Below 2.6	8	7	3							
2.6–2.9	13	22	6	1						
3.0–3.4	10	48	22	12	2	2				
3.5–3.9		4	8	6	4	1	1			
4.0–4.4		1	9	17	8	3	1			
4.5–4.9			4	8	17	6	6			
5.0–5.4		1	3	3	6	4	6	1		
5.5–5.9				2	4		5	4	2	2
6.0–6.4					1	2		6	4	
6.5–6.9							1	1	1	
7.0–7.4								1		1
7.5–7.9					3		4		1	1
8.0–8.4							1			
8.5–8.9								1	3	1
9.0–9.4							2		1	3
9.5–9.9										
10.0 and above						1			4	4
No. of cases	31	83	55	49	45	19	27	14	16	12
Median	2.8	3.2	3.3	4.1	4.7	4.8	5.3	6.3	8.7	9.1

score for twelve-year-olds, he would be considered bright. If he made a score above fourteen-year-olds, he was considered superior. If he made a score below the average for eight-year-olds, he was considered inferior, etc. Insofar as the test has not been standardized, this was the only method we could devise to make use of this test. The table is of little value in its present form as there are no norms with which to compare the various age groups. It may be noticed, however, that the test does give a fairly wide spread of scores

at each age which indicates that it does differentiate the children in any one age group.

Tables VI, VII, VIII and IX give the distribution of the achievement in each of the four subjects—arithmetic computation, arithmetic reasoning, paragraph reading and word meaning—for each school grade.

TABLE VII

DISTRIBUTION OF GRADE ACHIEVEMENT IN ARITHMETIC REASONING FOR EACH GRADE

Range of Grade on Test	School Grade									
	3	4	5	6	7	8	9	10	11	12
Below 2.6	22	22	5					1		
2.6–2.9	8	28	10	6						
3.0–3.4	1	25	15	16	3					
3.5–3.9		3	6	4	2	5				
4.0–4.4		2	7	9	12	4				
4.5–4.9		2	8	12	8	3	4			
5.0–5.4		2	1		10	3	5		1	
5.5–5.9			2	1	5		4	1	1	
6.0–6.4			1	1	4	1	6	4	1	1
6.5–6.9					1	1	3	1		
7.0–7.4							1	3	3	2
7.5–7.9							2	2		4
8.0–8.4						1	1		4	1
8.5–8.9										2
9.0–9.4								1	2	
9.5–9.9								1		
10.0 and above						1	1		4	2
No. of cases	31	84	55	49	45	19	27	14	16	12
Median	Bl. 2.6	2.8	3.3	3.7	4.8	4.6	6.1	7.2	8.2	7.8

Table VI presents the distribution for arithmetic computation. The most interesting thing to note in this table is the wide distribution of actual achievement for the various grades. For example, the children who are classified in school as being in grade nine, as far as the tests are concerned, range from 3.5 to 9.5. Those in grade eleven, range from 5.5 to above 10. This wide distribution of achievement within any one grade indicates that the children are poorly classified. The last row at the bottom of the tables gives the

median achievement for each grade. The median achievement of the eighth grade, for example, is 4.8. The median achievement of the ninth grade is 5.3, that is, the children of the ninth grade in this school are doing on the average about the same work as the fifth grade in the average public school in this age.

Table VII, VIII and IX are to be interpreted in the same way.

TABLE VIII

DISTRIBUTION OF GRADE ACHIEVEMENT IN PARAGRAPH READING FOR EACH GRADE

Range of Grade on Test	School Grade									
	3	4	5	6	7	8	9	10	11	12
Below 2.6	27	37	4	4	1					
2.6–2.9	4	32	25	14	3					
3.0–3.4		10	18	17	10	6	2	1	2	
3.5–3.9		1	2	10	16	2	9	1		
4.0–4.4		2	2	1	10	3	4	2		1
4.5–4.9		2	2	3	3	2	9	3	3	1
5.0–5.4			1		3	5	1	2		
5.5–5.9							1	1	3	2
6.0–6.4						1		1		2
6.5–6.9								1	1	1
7.0–7.4										1
7.5–7.9									1	
8.0–8.4							1		1	1
8.5–8.9								1		
9.0–9.4										
9.5–9.9										
10.0 and above							1		4	3
No. of cases	31	84	54	49	46	19	28	13	15	12
Median	Bl. 2.6	2.8	2.8	3.1	3.8	4.2	4.7	4.8	5.9	6.7

Table X summarizes the results of the four previous tables by showing the median grade achievement and the median chronological age for each grade in school. Reading across, the table is to be interpreted as follows: The children in grade twelve have a median chronological age of 19.2. The grade achievement in arithmetic computation is 9.1. Their grade achievement in arithmetic reasoning is 7.8 and their average achievement in reading paragraphs is 6.7 while their grade achievement in reading words is equivalent to 7.2. Of

TABLE IX

DISTRIBUTION OF GRADE ACHIEVEMENT IN WORD MEANING FOR EACH GRADE

Range of Grade on Test	School Grade									
	3	4	5	6	7	8	9	10	11	12
Below 2.6	22	11	2	1						
2.6–2.9	7	22	3	3	1					
3.0–3.4	2	26	14	9	1	2				
3.5–3.9		17	14	16	8	1	2			
4.0–4.4		6	12	16	20	4	6	1		
4.5–4.9		1	5	2	13	3	8	1	3	1
5.0–5.4			3	2	1	4	2	4	1	1
5.5–5.9		1	1		2	3	5	2	4	1
6.0–6.4							2	2		
6.5–6.9							1	1	1	1
7.0–7.4						2		1	1	3
7.5–7.9							1			1
8.0–8.4										1
8.5–8.9							1			
9.0–9.4										1
9.5–9.9									1	
10.0 and above								1	4	2
No. of cases	31	84	54	49	46	19	28	13	15	12
Median	Bl. 2.6	3.2	3.7	3.7	4.3	4.8	4.8	5.1	5.8	7.2

TABLE X

MEDIAN CHRONOLOGICAL AGE AND MEDIAN GRADES ON STANFORD ACHIEVEMENT TEST FOR EACH SCHOOL GRADE

Grade	C.A.	Grade Achieve. in Arithmetic Computation	Grade Achieve. in Arithmetic Reasoning	Grade Achieve. in Reading Paragraphs	Grade Achieve. in Reading Words	Number of Cases
12	19.2	9.1	7.8	6.7	7.2	12
11	19.0	8.7	8.2	5.9	5.8	16
10	18.2	6.3	7.2	4.8	5.1	14
9	18.3	5.3	6.1	4.7	4.8	27
8	18.0	4.8	4.6	4.2	4.8	19
7	15.7	4.7	4.8	3.8	4.3	45
6	16.5	4.1	3.7	3.1	3.7	49
5	14.2	3.3	3.3	2.8	3.7	55
4	14.0	3.2	2.8	2.8	3.2	83
3	10.7	2.8	Bl. 2.6	Bl. 2.6	Bl. 2.6	31

course, in each case these children are compared with the norms for normal hearing children. Table X is presented graphically in Figure II. The grade in school is indicated along the horizontal axis while the grade achievement on the

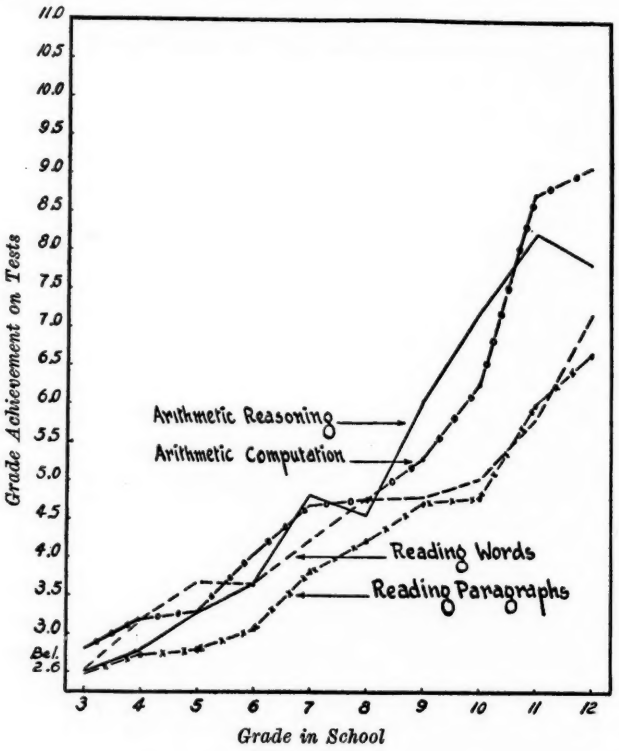


FIGURE II

Median Grade Achievement on Tests for Each Grade in School for Each Subject

tests is indicated on the vertical axis. The different subjects are indicated by the different graphs.

Two or three general conclusions can be derived from these graphs. First, the achievement in both arithmetic computation and arithmetic reasoning is in general higher than that

in reading. The ability of the children to read and understand words is in general superior to their ability to read and comprehend directions. Second, in general there seems to be a more rapid improvement in all subjects above grade nine than in the earlier grades. For example, in arithmetic computation, the pupils make on the average about two grades progress in the first six years, while in the last three years they make four grades progress. In other words, they progress four times more rapidly per year in this subject in the last three grades than they do during the first six grades. About the same thing holds true in regard to arithmetic reasoning. In reading, the difference between the achievement in high school and elementary grades is not so great. Here also there is more rapid achievement per year during the last three grades than in the previous grades. Third, the achievement in the first six grades is very slow. For example, in reading paragraphs they improve about one-half grade during the first six years. In the third grade they are on the average below 2.6 while in the sixth grade their grade achievement is 3.1, an improvement of about one-half grade in the three years.

Figure III presents the grade level for each subject for each grade in shool. This is another method of presenting some of the data of Table X. For example, grade ten has an average achievement in arithmetic computation of 6.3 and an average achievement of 7.2 in arithmetic reasoning, 4.8 in paragraph reading and 5.1 in word reading. The other graphs are interpreted in the same way.

These graphs indicate that there is a considerable amount of unevenness in each grade.

Table XI presents the distribution of chronological ages for each school grade. The median chronological age is presented in the last column at the bottom of the table. The outstanding thing that the table presents is the wide distribution of chronological age within any one grade. For example, the children in grade four range from ten to twenty years of age, the children in grade five from twelve to twenty years of age, and so on. This wide distribution

of chronological ages within any one grade must make both instruction and discipline difficult even though the classes may be small.

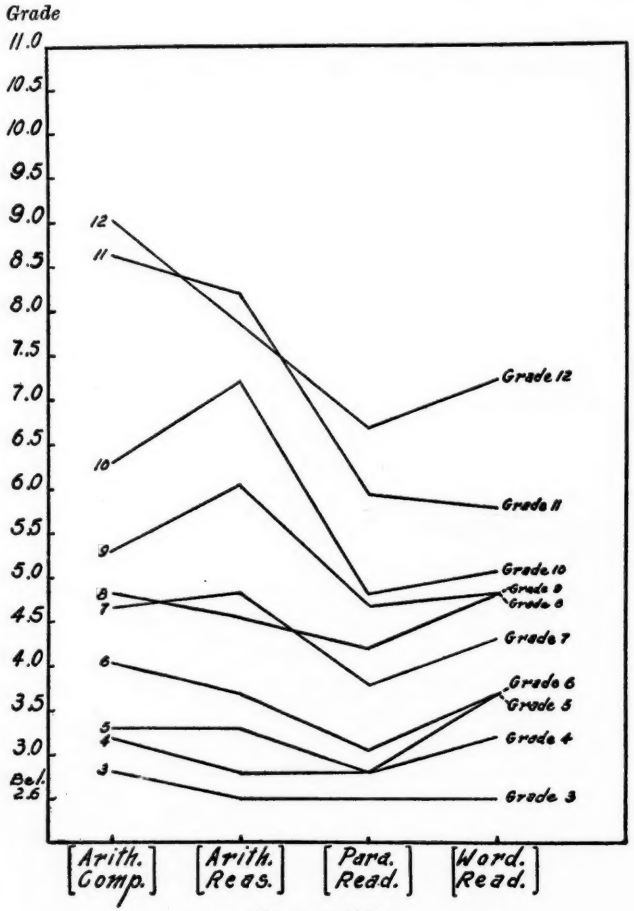


FIGURE III

Median Grade Achievement for Each Grade in School in Arithmetic and Reading

Table XII gives the distribution of the IQ.'s on the Point Performance Scale, given individually. The first column

gives the range of IQ., the second the number of cases, the third the percentage of the entire group within that range, and the fourth gives the classification. (It should be here stated that the classification adopted for this test was the same as that used at the Institute for Juvenile Research.)

TABLE XI

DISTRIBUTION OF CHRONOLOGICAL AGES FOR EACH SCHOOL GRADE ILLINOIS SCHOOL FOR THE DEAF

C.A.	Grade									
	3	4	5	6	7	8	9	10	11	12
8										
9	1									
10	9	2								
11	8	9								
12	8	9	3	1						
13	3	22	12	4	1	1				
14	1	19	10	4	3					
15	1	11	16	7	10	1		2		
16		3	5	16	13	2	5	2	2	
17		5	2	5	10	5	3	2	2	2
18		2	4	8	3	3	4		4	1
19			3	3	3	5	7	6	3	2
20		2	1		3	2	6	1	5	5
21				1			1	1		2
22							1			
23							1			
No.	31	84	56	49	46	19	28	14	16	12
Median	10.7	14.	14.2	16.5	15.7	18.	18.3	18.2	19.	19.2

SUGGESTIONS AND RECOMMENDATIONS

The following suggestions and recommendations are made on the basis of this survey:

1. As far as we can indicate from the tests, the children should be graded more uniformly. It seems unfair to some of the children, and perhaps unnecessary, to have children who are able to do fifth and sixth grade work in the same grade as those who are capable of doing only second and third grade work. Of course, in every school there is a fairly wide range within each grade. This range rarely exceeds, however, more than two or three grades. In the Jacksonville School the range is as much as five or six grades.

2. It seems that a more careful analysis of the work of the elementary school should be made to determine why progress is so slow in the various subjects during these early years. Of course, this may be due to the fact that it takes some time for deaf children to acquire the necessary fundamentals to make rapid progress. On the other hand it may be due to the fact that the instruction in the two schools is not integrated or that the instruction in the elementary

TABLE XII
DISTRIBUTION OF IQ. ON POINT PERFORMANCE SCALE

Range of IQ.	No. of Cases	Percentage	Classification
40– 49	2	.8	Feebleminded
50– 59	11	4.3	Feebleminded
60– 69	22	8.7	Feebleminded
70– 79	42	16.6	Borderline Defective
80– 89	44	17.4	Dull and Backward
90– 99	38	15.0	Average
100–109	62	24.5	Average
110–119	27	10.7	Superior
120–129	2	.8	Very Superior
130–139	1	.4	Very Superior
140–149	2	.8	Very Superior
Total	253	100.0	

Median IQ. = 92

grades is not at the same high level as that of the upper grades.

3. A more careful study of each individual child should be made. Not only his intelligence but also his social background and attitude toward himself, toward his school, toward his parents and toward his future vocation should be studied.

In other words a complete study of the general personality of the children in relation to their physical development should be made.

4. Several of the children in school should be considered for permanent custodial care, such as is given at Lincoln or Dixon. Before any steps are taken for the commitment of these children, a more careful study should be made both of their physical development, social background and gen-

eral behavior. A more careful study of their intellectual ability than the one which we were able to make in our brief survey should also be made.

5. Several children should be considered for advancement of one grade or more. There are a number of children whose grade placement, at the present time, in school is much above that of other children in their grade and below their mental and educational level.

6. There are several of the older boys and girls who seem to have reached their maximum educational achievement. It does not seem that they will profit by a longer stay in this school especially in the academic department. While these boys are not eligible for commitment to a state institution, they could do routine work on a farm or some simple job in a factory. This would save a great deal of the teacher's time and make room for those who are more capable of profiting by the instruction at Jacksonville and probably at the same time be the best method of treatment for the children.

7. Educational tests should be given each year to the upper grades in order to secure a measure of the progress of the child from year to year. This would entail little expense and give an objective determination of how effective the instruction had been in the previous grade during the year. The tests could be especially selected for deaf children and with the purpose of measuring progress in mind. Such objective measurements have been known to stimulate and improve instruction wherever they have been used.

VERNE W. LYON,
SEYMOUR STEIN,
ALLEN LEVIN,
EMILY JOHNSON,
DOROTHY FOGWELL,
ANDREW W. BROWN,
Institute for Juvenile Research,
Department of Public Welfare,
Chicago, Illinois.

SCHOOL ITEMS

Ahmedabad School, India—We are informed by Mr. Pranshankar Lallubhai Desai, principal of this school, that a number of former pupils have started independent shops for tailoring and gold and silver thread embroidery and that their work is highly appreciated by the public.

The school was honored by a visit early in December from Lady Sykes, the wife of His Excellency the Governor of Bombay, and it is reported Her Ladyship was highly gratified with everything she saw there.

Arizona School.—Recently a class in metal work was organized. As the state's leading industry is mining, it is thought that training along this line will be beneficial to the boys of the school and will aid them in finding work when they have completed their schooling.

Beverly School.—Miss Elizabeth Daniel, former principal in the West Virginia School, is now assistant principal in this school.

Georgia School.—This school is this year operating under a two-phase rotating schedule that puts twice the former number of children in the industrial department. This department was made much stronger by the election of Mr. Barton Clark, printer, and Mr. Christopher G. Smith, instructor of carpentry and associated studies.

Changes in personnel at the beginning of the current school year show the resignations of Miss Kate Alcorn, principal, Miss Eleanor A. Sims and Miss Nan Jeter, the latter to accept a position in the North Carolina School. Strict economy prevented the employment of other teachers to fill these vacancies. New officers of the Academic Department are Mr. Stahl Butler, principal, Miss Pauline Schmidt, assistant principal, and Miss Marie Kennard, primary supervisor.

A new hospital building has relieved to some extent the crowded condition of the boys' dormitory. It is a $23,000 structure, and is modern and entirely adequate for the needs of the school. It is only partially furnished as yet.

Nebraska School.—The new power house, erected a year ago, is now equipped and in running order, using oil as fuel in place of coal. A new laundry building was completed the past summer and is now in use.

New York School.—At a special meeting of the members of the Corporation of The New York Institution for the Instruction of the Deaf and Dumb held at the school February 7, a resolution presented by the Board of Directors to change the name of the institution to The New York School for the Deaf was adopted. The President and Secretary of the Corporation were directed to proceed with the necessary steps to make the change legally effective, and on February 14 the school name was finally recorded by the secretary of the state of New York as noted in the resolution.

Pennsylvania Institution.—Application has been made to the court by the Directors of the Pennsylvania Institution for the Deaf to have the name of the institution changed to The Pennsylvania School for the Deaf.

Three more classrooms have been equipped with hearing aids. There are now four rooms equipped for instruction by air conduction instruments, two for the Radioear and two for the Teutonophone. The school also uses the Phipp's Unit and the Vibravox, bone conduction instruments, in daily instruction.

MISCELLANEOUS

The International Congress.—It is possible to report at this time that plans for the International Congress on the Education of the Deaf, June 18 to 23, 1933, at the New Jersey School at West Trenton, are in process of final formulation and that definite announcement concerning the complete program of speakers will soon be issued. Each of the organizations meeting jointly has in preparation a schedule of features of more than usual attraction, and it is certain the week of activities will be one of great profit to all who will attend. Superintendent Alvin E. Pope, as presiding officer of the Congress, has been making every

effort to enlist the interest of those in other lands who are concerned with the education of the deaf, and, with the growing interest that is being manifested, to all appearances the occasion promises to be one of the great meetings in the history of the profession.

Certification.—Announcement is made of the appointment of Mrs. Bess M. Riggs, superintendent of the Arkansas School, to the place on the Conference Committee on Certification made vacant by the death of Dr. Thos. S. McAloney. This is the committee entrusted with the task of certification of training centers for teachers of the deaf. This committee, too, is in charge of the registration and certification of teachers under the plan adopted by the Conference of Executives of American Schools for the Deaf.

Since our last report, in the January ANNALS, the persons named below have submitted applications for certification to the secretary of the Executive Committee of the Conference.

Lewis A. Backstrom, Minnesota School
Mabel M. Campbell, Indiana School
Julia Cantey, Washington School
Opal Terese Coffman, Le Couteulx St. Mary's School
Esther Dorothea Krallman, Le Couteulx St. Mary's School
Ethel May Newman, Washington School
Julia Kelso Palmer, Minnesota School
Lucille Riggs, Illinois School
Victor O. Skyberg, New York School
Victor R. Spence, Minnesota School
Hilda Tillinghast, Lincoln (Nebraska) Day-School
Lalla Wilson, Florida School

Executive Committee of the Conference.—Dr. Oscar M. Pittenger, Superintendent of the Indiana School, has been appointed a member of the Executive Committee of the Conference of Executives of American Schools for the Deaf, to take the place made vacant by the death of Dr. Thos. S. McAloney. We are glad, therefore, to have Dr. Pittenger's name on the cover sheet of the ANNALS.

Corrections in the January ANNALS.—We acknowledge, with regret, a number of errors in the data contained in the January ANNALS regarding schools for the deaf. Through inadvertence, the Ontario School was incorrectly reported as operating under the Combined System when it should have been reported as using only the Oral Method of instruction.

The other errors concerned the list of instructors. Unintentionally the names of Sister M. Constantia, M.A., Principal; Sister Rose Gertrude, M.A., Assistant Principal; Sister M. Margaret, B.A., Superintendent; and Sister M. Columba, Assistant Superintendent,—all of Le Couteulx St. Mary's School, Buffalo, N.Y.,—were omitted.

The many professional friends of Superintendent T. C. Forrester of the Rochester School may have been surprised to note in the same list of instructors a usurper in the person of one "Forrest, Thomas Carlaw, F.E.I.S." etc., We hasten to add this was only a playful conspiracy on the part of the printers to disguise our genial colleague. Mr. Forrester himself in passing his compliments to the printers, says: " 'Forrest' isn't such a bad name; but as it is more suggestive of wood, I would, of course, prefer the 'Forrester.' "

Deaf Students Winners in a Poetry Contest.—To awaken interest in creative writing, the Poetry Group of the Education Committee of the Washington Branch of the American Association of University Women invited the undergraduates of the colleges of the District of Columbia and vicinity to enter a poetry contest sponsored by the Group. Three prizes of $5.00 each were offered to the contestants producing the best poems. Each contestant was permitted to submit no more than three selections. The following were asked to participate: American University, George Washington University, Wilson Teachers College, Trinity College, University of Maryland, Gallaudet College; and later Georgetown University asked permission to enter.

It is a matter of great satisfaction that two students

from Gallaudet College were adjudged the winners of the first and second prizes. Mr. Stephen W. Koziar, a member of the Junior class, was awarded first prize for a beautiful piece, "Remember Me," a poem of fine lyric quality. Mr. Koziar, who also is a member of the college basketball team, lost his hearing at the age of two, and came to Gallaudet College from the American School at West Hartford. The winner of the second prize was Mr. Loy E. Golladay, also a member of the Junior class, with a poem called "The Spirit of Chichen-Itza," fancifully suggestive of the haunting lure of the tropic jungle. Mr. Golladay, who is also editor of the student publication, the *Buff and Blue*, became deaf at the age of eight and entered Gallaudet College from the West Virginia School.

International Interest in the Problems of the Deaf.—A letter from the editor of the ANNALS addressed to the Secretariat of the League of Nations and inquiring as to whether that body has been considering the problems of the deaf for special study, elicited the following reply:

Geneva, December 21, 1932

DEAR MR. FUSFELD:

In reply to your letter of November 29, I beg to inform you that on June 15, 1932, the Government of the Union of South Africa addressed a letter to the League of Nations asking whether it would be possible for the League to carry out an international study of deafness similar to that which the League's Health Committee had carried out for the blind.

This request was referred to the Health Committee which met at Geneva in October last. The Committee was informed that this problem was being made the subject of an elaborate official study in the United Kingdom, and considered it would be premature to set up a Commission of Experts before having studied that report. Nevertheless, authority was given to the Bureau of Health Committee to proceed with the constitution of such a commission should circumstances arise calling for such action.

The report of the League's Health Organization on the Welfare of the Blind to which reference is made above, may be obtained from the World Peace Foundation, 40 Mt. Vernon Street, Boston, Massachusetts.

Yours sincerely,

FRANK G. BONDREAU
League of Nations

The official study in the United Kingdom referred to in this letter was one undertaken by Dr. A. Eichholz, formerly

government inspector of schools for the deaf. This study has just been published, a summary of which we hope to be able to present in the next number of the ANNALS.

Superintendent Manning's Analysis of School Problems.—In the Annual Report of the Trustees of the Western Pennsylvania School for the Deaf, for the year ending September 30, 1932, Superintendent A. C. Manning refers in his review of the activities of the school to a number of matters which, because they probably reflect conditions on a wider front than his own school, should be given greater prominence. One of these questions, that of vocational training needs, is summed up in this wise:

> A careful study of our records for the past ten years reveals the fact that of the 437 pupils admitted only 56 graduated. The inability of the vast majority of those admitted to complete our academic course in a reasonable period of time convinces us that we should provide more vocational training for this majority. This condition emphasizes the necessity for enlarged and better equipped vocational departments.

With respect to improvement in teaching, Superintendent Manning looks hopefully to the immediate future.

> We have continued our policy of oral instruction, believing that the great need of our profession is better speech and more speech, not for the sake of speech alone but because we believe the education of the normal deaf child can best be accomplished in an oral atmosphere. The antagonism of those who oppose oral instruction is not nearly so harmful to the progress of oralism as is the inefficiency of poor oral teachers. One of the chief causes of opposition to oral work is the fact that so much of the oral teaching done in the United States has been inferior. For a considerable number of years just before the World War the country was swept by a clamor for oral instruction. There were not enough well trained, capable teachers to supply the demand. But the demand had to be supplied and it was supplied by poorly trained teachers who could not do what was expected of them. Theoretically manual teachers were made into oral teachers overnight. The result was disastrous, for miserably poor speech was acquired. The War lowered the standard of teaching still further, and so-called oral instruction suffered correspondingly. Much of the speech produced has been inexcusably poor. The tide has turned and with college graduates applying for membership in training classes, a better day has dawned. Inefficient training is being supplanted by superior training. Better teaching will follow and better speech will be one of the results. With it will come better education along all lines, for the object of oral instruction is not merely speech but *education.*

An Invitation from Germany.—We have this communication from Herr E. Schorsch, educational director of the

school for the deaf of the city of Berlin and president of the Association of German Instructors of the Deaf, addressed to instructors of the deaf in America.

Berlin, *February 27, 1933.*

Dear Colleagues:

I have been told that a great number of teachers are coming from America to Germany this summer. I understand also that there will be among them a great many teachers of the deaf.

The German teachers of the deaf will be delighted to welcome you to our country. As soon as we have more exact information as to your tour, we wish to notify the schools in the cities which you want to visit. You will find everywhere a sincere welcome, and you will be shown what is being done in Germany for the education and care of the deaf. Above all we shall be delighted to see you in Berlin and to present our work and methods for the instruction of deaf children as well as the care of the adults.

I hope very much that you will have great pleasure and much inspiration from your studies in Germany, and welcome you in behalf of the Association of German Instructors of the Deaf.

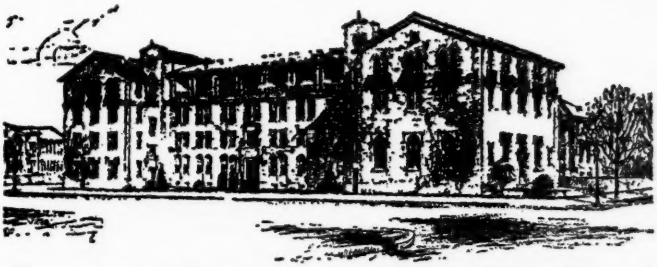
Very sincerely yours,

E. SCHORSCH,

President, Association of German Instructors of the Deaf.

The headquarters of the Association are at Albrechtstrasse 27, Berlin NW 7.

INVENTIONS—PATENTS—PRODUCTS prepared for the market on sale, royalty, licence or other basis. Write for information and costs. Alfred E. Glascock, 805½ Tenth Street, N.W., Washington, D.C.



Central Institute for the Deaf

NATIONAL RESIDENTIAL AND DAY SCHOOL
FOR THE DEAF AND DEFECTIVES IN SPEECH

Approved by Advisory Council of Foremost Ear Specialists and Educators
Beautiful Newly Completed $400,000 Building Contains the Latest and Most Progressive Equipment for Scientific Research of Deafness and Problems of Speech Education.
Oral School for Deaf Children C. I. D. offers all advantages of exclusively Oral Training and constant expert medical supervision to both Resident and Day Pupils. Education and Training from Kindergarten (3 years of age) to College.
Classes for Hard-of-Hearing Children A new department has been established for the special training of Hard-of-Hearing children in Lip-Reading and Speech; all grades.
Lip-Reading Instruction for Adults Private and Class Instruction for the adult deaf. Conversational Classes for advanced pupils.
Correction of Speech Defects Correction of Imperfect Phonation, Indistinct Articulation, Lisping, Stuttering, Stammering and Aphasias.
Teachers' Training Classes Over 500 teachers are either graduates of the regular Normal Classes or hold certificates of attendance in Summer Normal Classes of C. I. D.

All Classes for Pupils and Teachers Limited

Illustrated Booklet Sent on Request

Dr. M. A. Goldstein, Director - - - Miss Julia M. Connery, Principal
818 S. KINGSHIGHWAY, ST. LOUIS, MO.

Cleary Oral School for Deafened Children

IN THE PINEWOODS AT LAKE RONKONKOMA, L.I.

A country day and boarding school for children whose education has been retarded by deafness, impaired hearing or speech defects. Classrooms equipped with Radioear. Kindergarten to College. Riding and Winter Sports. Large Campus.

Fall Term Opens October 3rd ***Catalogue***

One hour and a half from New York City **Bus Service**

Camp Peter Pan
LAKE RONKONKOMA, LONG ISLAND

When in England, Don't Forget to Visit

The

DEAF LIBRARY

"Ephphatha House," 5 Grange Road,
EALING, W.5 (Middlesex)

All visitors interested in the Past, Present and Future of the Deaf, Deaf-Blind, Hard of Hearing and other grades and types of Deafness, are cordially welcome to view the Collection of:

1. Over 5,000 Ancient and Modern Books, Pamphlets, Magazines and Foreign Papers. The largest and most complete Deaf Library in London and the South of England. The books are for reference only, and no book or other item may be removed or borrowed.
2. Newspaper Cutting Albums, Model Theatre Scenes of Deaf Historical Groups, Gramophone Record Library and various data likely to be of use to those working among or for the Deaf.
3. Over 4,500 Slides, Photographs and Picture Post Cards of Deaf Work throughout the world from the earliest times.

For further particulars please apply to:

Mr. SELWYN OXLEY, Officer d'Instruction Publique des Beaux Arts Francais, Hon. Secretary and Librarian of the Guild,
5, Grange Road, Ealing, London, W.5.

Stations: Ealing Broadway (G.W.R. and Tubes), Ealing Common and South Ealing. 'Buses and Trams.

A CORDIAL WELCOME AWAITS YOU!

THE BARRY FIVE-SLATE SYSTEM

One of the Best and Most Scientific Systems
of Teaching
Language to Deaf Children

PRICE $2.50 NET

Send Orders to

THE COLORADO SCHOOL FOR DEAF AND BLIND
COLORADO SPRINGS, COLORADO

STRAIGHT LANGUAGE

By EDITH FITZGERALD

Of interest to teachers and mothers of deaf children
Price, $3.15 postpaid.

THE McCLURE CO., INC., Staunton, Va.

"FIRST LESSONS IN ENGLISH"

A course of systematic instruction in language, in five volumes, by CAROLINE SWEET, Single copy, 50c.

All five books now on sale.

A Preparatory Book, which will save teachers of preparatory and first-year classes the task of hectographing year books, written by EDITH M. RICHARDS, is also on sale. Price, 50c.

"STORY READER No. 1"

Sixty short stories prepared for young pupils, compiled by IDA V. HAMMOND. Single copy, 50c.

"STORY READER No. 2"

Short stories prepared for young pupils, compiled by IDA V. HAMMOND. Single copy, 40c.

"STORIES FOR LANGUAGE STUDY"

Short stories for pupils in their third or fourth year at school, prepared by JANE B. KELLOGG. Price, 50c.

"TALKS AND STORIES"

Contains nearly a hundred short stories and seventy-five conversations for practice in language, prepared by WILLIAM G. JENKINS, M.A. Price, $8.00 per dozen. Single copy, 70c.

"WORDS AND PHRASES"

Examples of correct English usage, by WILLIAM G. JENKINS, M.A. Price, $6.00 per dozen. Single copy, 60c.

"BITS OF HISTORY"

One hundred stories gathered from United States History, compiled by JOHN E. CRANE, B.A. Single copy, 75c.

"WRITTEN EXERCISES ON DIRECT AND INDIRECT QUOTATIONS"

By J. EVELYN WILLOUGHBY, late instructor in the Clarke School. Single copy, 50c.

"THE STORY OF AMERICA FOR LITTLE AMERICANS"

By GRACE M. BEATTIE, Instructor in the Colorado School. New Edition. Price, single copy, $1.00.

"ELEMENTARY ENGLISH HISTORY"

By HELEN E. WHEELER. Single copy, 50c.

Published by the

AMERICAN SCHOOL FOR THE DEAF, West Hartford, Conn.

BOOKS FOR USE IN SCHOOLS FOR THE DEAF

English Book I, for Upper Primary Grades.....$ .60
English Book II, for Intermediate or Grammar Grades.... .60
English Book III, for High-School Grades and a self-instructor ..... .75
Illustrated Reader, for Pupils of the Third and Fourth Grades ..... .60

The author of these books is J. W. Jones, late Superintendent.

Beginning History Stories for Children, by Lela Acker of the Kansas City, Kansas, School.....$ .75
First Lessons in Geography, by Grace M. Beattie of the Colorado School 1.00
English Phrases and Idioms, by Dr. J. L. Smith of the Minnesota School 1.60

Published by the State School for the Deaf, Columbus, Ohio

OUTLINE OF LANGUAGE WORK

BOOK I

With Methods of Presentation of the Work of the First, Second, Third and Fourth Years.

Price per copy, $2.50

BOOK II

With Methods of Presentation of the Work of the Fifth and Sixth Years.

Price per copy, $2.50

Send orders to

EDITH M. BUELL
904 Lexington Avenue, New York City

THE DRISCOLL ARITHMETIC

by

ANITA DRISCOLL, EDITH M. BUELL, ELIZA MCSHERRY WODDROP AND COLIN S. BUELL

THE TEACHER'S BOOK gives the work of the Kindergarten and Grades 1 and 2, also details of presentation of the work through Grade 4. Price per copy, $1.25.

BOOK I. The children's book for Grades 3 and 4. Price per copy, $1.00. In lots of 12 or more, 85 cents per copy.

Order from

THE VERMONT PRINTING CO.
BRATTLEBORO, VT.

BOOKS FOR THE DEAF

By MARGARET J. STEVENSON

THE LIFE OF JESUS (Revised)
For Primary Classes. Cloth; Price, 30 cents net.

PRIMARY GEOGRAPHY, NUMBER I (Revised)
Cloth; Price, $1.00 net

PRIMARY GEOGRAPHY, NUMBER II
Cloth; Price, $1.00 net

NATURE FACTS (Revised)
Used correlatively with Primary Geographies.
Cloth; Price, 80 cents net

Send All Orders Direct To

MARGARET J. STEVENSON, OLATHE, KANSAS

BOOKS FOR THE DEAF

By LOUISE UPHAM
Principal of Cresheim Hall, Mt. Airy, Philadelphia

THE BEGINNER'S BOOK
Cloth; Price, $1.00

THE QUESTION BOOK
For Second-Year Classes. Cloth; Price, $1.00

LANGUAGE DRILL STORIES
For Third-Year Classes. Price, $1.00

WHAT PEOPLE DO
Short Lessons on the Trades and Occupations—
Price, $1.00

The above books are attractively illustrated in color.

Send Orders Direct to the Author

CRESHEIM HALL, MT. AIRY, PHILADELPHIA, PA.

THE WRIGHT ORAL SCHOOL

ESTABLISHED IN 1894

Fully equipped to educate a deaf child by the speech method from Kindergarten to College entrance. No use of finger spelling or of the sign language is permitted. Children are taken at two years of age. Advanced students take New York State Regents and College Board Examinations. Languages, music and higher subjects are given.

LARGE ENOUGH TO BE A REAL SCHOOL
SMALL ENOUGH TO BE A REAL HOME

CORRESPONDENCE COURSE FOR MOTHERS OF LITTLE DEAF CHILDREN

which has been prepared and copyrighted by the Founder and Advisor, JOHN DUTTON WRIGHT, and by which parents are enabled to save for their children the priceless years before school age is reached, and begin at home their training in lip-reading, speech, and auricular development.

The school also publishes three books recently written by Mr. Wright:

"The Little Deaf Child," a book for parents. $1 postpaid.
"Handbook of Practical Auricular Training," a book for parents and teachers. 50 cents postpaid.
"Handbook of Speech Teaching to the Deaf," a book for teachers. $1.25 postpaid.

This school specializes on the hard-of-hearing child.

ONE MOUNT MORRIS PARK, WEST, NEW YORK CITY

(Now known as Nathan Davis Place)

"Language Stories and Drills"

Books I, II, III and IV

Gertrude W. Croker, Mabel K. Jones and M. Evelyn Pratt

Illustrated by Tony Sarg

Price per copy, $1.25

Teachers' Manuals, $.50 Postage not included

Send orders to

CROKER, JONES & PRATT
Public School 47, 225 East 23rd St.
New York City

CONTENTS

THE CONFERENCE OF EXECUTIVES OF AMERICAN SCHOOLS FOR THE DEAF ..... *Percival Hall, Litt.D.* 95

Regular Meeting at West Trenton 95

EDUCATIONAL PROBLEMS ..... *Ida Donald Elliott* 96

RETURNS FROM A QUESTIONNAIRE OF THE OHIO DEAF-MUTE ALUMNI ASSOCIATION ..... *Charles Scott Berry, Ph.D.* 100

Introduction ..... *Kreigh B. Ayers* 100

OUR SCHOOLBOY PATROL ..... *J. White Thomas* 112

DO THE DEAF SEE MORE THAN THOSE WITH ALL THEIR SENSES? ..... *R. Hofmarksrichter* 113

BEBANCHI—THE PANTOMIME LANGUAGE OF THE HAUSA DEAF AND DUMB ..... *P. G. Harris* 116

AN ANALYSIS OF THE FIRST-YEAR VOCABULARIES OF THE PUBLIC RESIDENTIAL SCHOOLS FOR THE DEAF IN THE UNITED STATES —II ..... *Marné Lauritsen Groff, Ph.D.* 120

Analysis of Data (Continued), 120.

THE VOCATIONAL ACTIVITIES OF PUPILS OF THE PENNSYLVANIA INSTITUTION FOR THE DEAF DURING THE PAST TWELVE YEARS ..... *Harry B. Brown* 132

Summary of Replies to Questionnaires Sent to Former Pupils, 134; Summary of Replies to Questionnaires Sent to Schools for the Deaf, 138.

SURVEY OF THE ADULT DEAF OF MARYLAND. *Ignatius Bjorlee, M.A.* 144

Introduction, 144; Questionnaire, 146; Commission's Report to Governor Ritchie, 154.

REPORT OF THE 1931 SURVEY OF THE ILLINOIS SCHOOL FOR THE DEAF ..... *Verne W. Lyon, B.S., Seymour Stein, B.S., Allen Levin, B.Ph., Emily Johnson, B.A., Dorothy Fogwell, B.A., and Andrew W. Brown, Ph.D.* 157

Purpose, 157; Tests Used, 157; Giving of the Tests, 159; Results, 159; Suggestions and Recommendations, 173.

SCHOOL ITEMS ..... *I. S. F.* 176

Ahmedabad, Arizona, Beverly, Georgia, 176; Nebraska, New York, Pennsylvania, 177.

MISCELLANEOUS ..... *I. S. F.* 177

The International Congress, 177; Certification, 178; Executive Committee of the Conference, 178; Corrections in the January ANNALS, 179; Deaf Students Winners in a Poetry Contest, 179; International Interest in the Problems of the Deaf, 180; Superintendent Manning's Analysis of School Problems, 181; An Invitation from Germany, 181.

The AMERICAN ANNALS OF THE DEAF is published bi-monthly during the school year, appearing in the months of January, March, May, September, and November. The subscription is $2.00 a year, payable in advance; January number, one dollar a copy; single numbers otherwise, 50 cents each.

Subscriptions made payable to the AMERICAN ANNALS OF THE DEAF may be sent to 450 Ahnaip St., Menasha, Wis., or to the Editor, Gallaudet College, Kendall Green, Washington, D.C.

GEORGE BANTA PUBLISHING COMPANY, MENASHA, WIS.